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The imperfective space in Tlacoahuaya Zapotec

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The imperfective space in Tlacoahuaya Zapotec

by

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Report

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The imperfective space in Tlacoahuaya Zapotec

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This paper focuses on imperfective TAM (tense-aspect-mood) categories in Tlacoahuaya Zapotec, an Otomanguean language indigenous to the Tlacolula Valley in Oaxaca, Mexico. While the inflectional TAM morphology of Zapotec languages has been broadly described, both synchronically and diachronically, the semantics of these TAM categories is less robustly analyzed. This paper is the first step in my larger research plan to holistically describe the Tlacoahuaya Zapotec TAM system. The goal is to contribute to the descriptive literature on Zapotec languages and to provide a basis for meaningful diachronic studies of Zapotec TAM, which in turn would contribute to our typological understanding of TAM systems and semantic change.

I approach Tlacoahuaya Zapotec imperfectives from three angles: (i) by considering the five imperfective TAM categories together to see how they delineate semantic (Aktionsart-based) verb categories (Chapter 2); (ii) by summarizing all the semantic contexts in which a single TAM category, the Imperfect *r-*, appears (Chapter 3); and (iii) by synthesizing analyses of imperfectives across Zapotec languages to probe the Proto-Zapotec system (Chapter 4). I conclude in Chapter 5.

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Chapter 1

Introduction

1.1 Motivation and goals

The TAM (tense-aspect-mood) system of a language is made up of multiple interconnected subsystems, which may include inflectionally-marked TAM categories, verb-specific Aktionsart (or “lexical aspect”), and temporal-modal adverbs. Although inflectional TAM morphology has been rigorously discussed in the Zapotecanist literature, the *semantics* of Zapotec TAM remains under-studied. As an initial step towards a holistic description of the Tlacoachahuaya Zapotec TAM system, this paper examines a single subsystem: expressions of imperfectives.

Name	Example with <i>ndyeny</i> ‘come up, rise’	
Imperfect	<i>rndyeny</i> ‘rises (habitually)’	
Progressive	<i>kandyeny</i> ‘is rising’	
Completive	<i>bndyeny</i> ‘rose, has risen’	
Potential	<i>indyeny</i> ‘will rise, might rise’	
Future	<i>zendyeny</i> ‘will (definitely) rise’	
Counterfactual	<i>nyendyeny</i> ‘was supposed to/was going to rise (but didn’t)’	
Name	Example	
Stative	<i>nazhěny</i> ‘is wide’	< <i>zhěny</i> ‘be wide’
Z-Progressive	<i>ze</i> ‘is going’	< <i>e</i> ‘go’
Ø-Progressive	<i>zaby</i> ‘is hanging’	< <i>zaby</i> ‘be hanging’; unmarked

Table 1.1: Tlacoachahuaya Zapotec TAM categories, with imperfective categories highlighted

I have identified nine TAM categories in Tlacoachahuaya Zapotec, shown in Table 1.1; these are divided between six primary categories, which appear on almost every verb, and three specialized categories which appear only on a restricted set of verbs. Five of these

categories — namely the Imperfect, Progressive, Stative, Z-Progressive, and Ø-Progressive, marked in orange in the table — can be categorized as imperfective. I am starting my investigation of Tlacoahuaya Zapotec TAM with the imperfective space because of this complexity. These five categories, all of which are primarily aspectual, are a window into not only the structure of Tlacoahuaya Zapotec TAM inflection but also the underlying semantics of Tlacoahuaya Zapotec verbs.

The scope of this paper is limited in several ways. The analysis I present here is a preliminary discussion of a complex topic, using data collected over the course of two pilot studies. As I am analyzing only a subset of the TAM categories, I may miss important details about the overall structure of the system. Furthermore, I have limited data on the syntactic behavior (and other Aktionsart-related properties) of different verbs. However, despite these restrictions, I have come to some important generalizations about the shape of the Tlacoahuaya Zapotec imperfective space. This discussion therefore provides a strong foundation for future research in this under-studied area of Zapotec grammar.

This paper will proceed as follows. The remainder of Chapter 1 is dedicated to outlining a simple framework for approaching TAM description (§1.2) and introducing Tlacoahuaya Zapotec as a language of study (§§ 1.3–1.4). In Chapter 2, I sketch the structure of the imperfective space, using the five imperfective categories discussed above as a basis to divide Tlacoahuaya Zapotec verbs into semantic classes. In Chapter 3, I narrow my focus to the Imperfect (*r*-) in particular and discuss its broad semantic range. In Chapter 4, I take a diachronic perspective, synthesizing analyses of imperfectives across Zapotec languages to probe the semantics of the Proto-Zapotec TAM categories. I present my conclusions and outline avenues for future research in Chapter 5.

1.2 Framework for describing TAM

In this section, I outline the baseline assumptions that I make about TAM systems and define the terminology I will use in the rest of the paper. I take great inspiration here from Carlota Smith (1997, among others), as well as Comrie (1976), Klein (2009), and Bohnemeyer (2014).

I assume a system along the lines of Smith’s (1986) “speaker-based approach”, where a speaker first identifies the temporal-modal properties of a SITUATION and then chooses the proper linguistic tools provided by their language to communicate those properties. The speaker presents this to the listener, who can then reconstruct the original mental representation of the situation. In this model, situations are *extra-linguistic*; they are the cognitive notions (the ideas and imaginings) that language describes.

The description of any given situation should include features (again, extra-linguistic) like tense, aspect, and mood. TENSE is the positioning of the situation in time. This is typically analyzed as a (linear, distal) relationship between speech time (the present moment/when the sentence is uttered), topic time (the temporal context established within a discourse), and situation time (when the situation occurs or is imagined to occur; also called “run time”). ASPECT is often described as the “internal temporal constituency” of a situation (Comrie 1976: 5). Most scholars take the key aspectual distinction to be between (i) PERFECTIVE situations presented as complete, closed entities (i.e. the situation time is enclosed by the topic time) and (ii) IMPERFECTIVE situations presented as ongoing (i.e. the endpoints of the situation time lie outside of the topic time). Finally, MOOD is understood to be the belief and intention of a speaker with regard to the reality of a situation — Is it real? Forecasted? Desireable but unachieved?

While I draw the term TAM SYSTEM from the acronym for tense, aspect, and mood, I understand the TAM system not as a simple one-to-one translation of these extra-linguistic features to linguistic signs but as a collection of grammatical resources, with highly language-specific semantics, that interlocutors use to present/interpret a situation. I understand the TAM system of a language to be made up of (at least) four interacting parts: (1) a closed set of grammatical TAM CATEGORIES which appear as inflection on the verb, for example the English Present Progressive, the Spanish Imperfecto, or the French Futur; (2) the semantic properties of individual verbs (and verb classes), i.e. AKTIONSART or lexical aspect;¹ (3) the semantics of temporal-modal adverbials and particles; and (4) a set of discourse/pragmatic

¹This can involve variables such as dynamicity, durativity, and telicity. See, for example, Smith 1997 on definitions of these variables.

conventions. The “structure” of the temporal-modal space, then, can be understood as the way these parts work together to create meaningful (language-specific) viewpoints or frameworks through which temporal-modal semantics are interpreted.

Notationally, I will use lowercase phrases to describe extra-linguistic concepts and title case phrases to mark language-specific TAM categories (e.g. “the Spanish Imperfecto marks imperfective situations located in the past”).

1.3 A note on the data

Unless otherwise noted, Zapotec data in this paper is from San Jerónimo Tlacoahuaya Zapotec and comes from my own research on the language. My transcriptions of Tlacoahuaya Zapotec data use the (roughly) phonemic orthography presented in §1.4.3, and morphological glosses reflect my current understanding of Tlacoahuaya Zapotec grammar. Additional Tlacoahuaya Zapotec data comes in form of tweets by Moisés García Guzmán, which are written in an ad hoc orthography. A final source is a written parable about an opossum and a coyote. Data from tweets ([BnZTweet](#)) and the parable ([tlacuache](#)) are presented in their original orthographies, but the segmentation, glossing, and free translations are my own, based on conversations with my Zapotec teachers.

I archive my data on a rolling basis at the Archive of the Indigenous Languages of Latin America (Plumb 2019b). Examples in this paper are cited using a short code followed by a timestamp; a list of these codes and their associated archive resources is listed on page 59. In the interest of transparency, I also use the following tags to differentiate different types of elicited and naturalistic data: *elic* = elicited by a prompt in the contact language; *const* = constructed in the target language by the researcher; *spon* = spontaneously produced by a Zapotec speaker during an elicitation session; *txt* = produced as part of a naturalistic (monologic) text. In the case of constructed data, sentences judged ungrammatical are marked with a star (*). The pound sign (#) marks data judged to be syntactically sound but semantically or pragmatically unusual. Sentences which are of dubious acceptability are marked with two question marks (??); most of these sentences are cases where my Zapotec teacher told me that the construction was “understandable, but not common”.

In data from external sources, I provide as detailed a reference as possible. Unless otherwise noted, I have preserved the original orthography, glosses, and translations, with the exception of superficial modifications to gloss abbreviations in order to minimize redundancy. A full list of gloss abbreviations is provided at the end of the paper.

1.4 San Jerónimo Tlacoahuaya Zapotec

1.4.1 Language classification and context

The Zapotec languages,² which form a large subgroup of the Otomanguean stock, are spoken by approximately 441,000 people across Oaxaca, Mexico, as well as in diaspora communities in the United States (Eberhard et al. 2019: [zap]). Although the precise number of Zapotec languages is under debate, the language group has a very high level of differentiation, with individual variants identifiable for each pueblo. This paper focuses on the variety of Zapotec spoken in San Jerónimo Tlacoahuaya (henceforth “Tlacoahuaya”), a town of about 2,300 residents (2010 INEGI census; see Martínez Hernández 2011: 40), located 21 kilometers east of Oaxaca de Juárez in the Tlacolula Valley.

Tlacoahuaya Zapotec is part of the Western Tlacolula Valley Zapotec dialect continuum,³ which is in turn contained within the Central Zapotec subgroup (see Fig. 1.1). Western Tlacolula Valley Zapotec is defined geographically as Zapotec varieties originating in the Tlacolula Valley, bounded by Oaxaca de Juárez on the west and Tlacolula de Matamoros on the east. For both linguistic and political reasons, varieties of Western Tlacolula Valley Zapotec are typically identified on the level of an individual pueblo.

To my knowledge, no rigorous phonological comparison of the Western Tlacolula Valley Zapotec varieties exist, so isoglosses cannot be specified here. Rendón (1970) notes that Tlacoahuaya Zapotec is quite similar to the languages spoken in San Francisco Lachigoló and San Juan Guelavía, while people from Tlacoahuaya have more difficulty understanding

²ISO 639-3 [zap]; Glottolog [zap01437] (Hammarström et al. 2019).

³ISO 639-3 [zab]; Glottolog [sanj1284]). This dialect continuum is sometimes called San Juan Guelavía Zapotec, but this is misleading, as the language spoken in the town of Guelavía is not identical to, or even necessarily representative of, the languages spoken in other towns in the region.

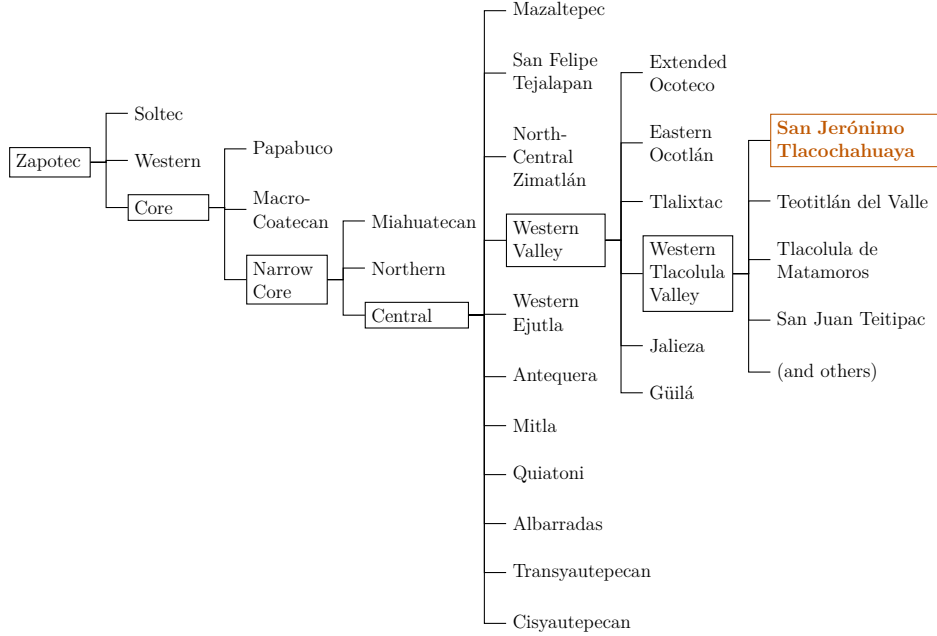


Figure 1.1: Classification of the Zapotec languages from Smith-Stark 2007, with modifications based on Campbell 2017 (see also Beam de Azcona 2014, 2018)

Zapotec speakers from Tlacolula de Matamoros (which is quite closely related to Quiavini Zapotec), and cannot understand the language from Teotitlán del Valle hardly at all. These intelligibility facts were echoed by my Tlacochahuaya Zapotec teachers during field trips in 2018 and 2019.

Some phonological differences between various Tlacolula Valley varieties may be seen in the words for ‘guava’ and ‘one’, as shown in (1). (Orthography in (1) is from the cited sources and is not necessarily phonemic; phonetic transcriptions of these examples are my own based on the audio recordings available in the cited sources.)

- (1) a. San Jerónimo Tlacochahuaya Zapotec (Lillehaugen et al. 2019b)
 [buɫgiɳ] *bugi* ‘guava’ [tubjɫ] *tuby* ‘one’
- b. San Lucas Quiavini Zapotec (Lillehaugen et al. 2019c)
 [wiɫ] *wi* ‘guava’ [teibɳ] *teiby* ‘one’
- c. Teotitlán del Valle Zapotec (Lillehaugen et al. 2019a)
 [wi²iɫ] *gwi* ‘guava’ [tuiɫ] *tui* ‘one’

Intelligibility between Western Tlacolula Valley Zapotec languages, grammatical variation

in the region, and the interaction of language attitudes with sociopolitical identity are topics for rich future research.

All indigenous languages in Mexico are severely marginalized, and racist ideas about indigenous people (and their cultures) are ubiquitous. As a result of this racism and the socioeconomic pressure from Spanish and English, fewer parents are teaching Zapotec languages to their children (see e.g. Chávez Santiago et al. 2015; García Miranda 2014). Official “endangerment status” reports on Zapotec languages are variable. For example, according to Ethnologue, there were 28,000 speakers of Tlacolula Valley Zapotec in 1990; the language is classified by Ethnologue as “developing”, that is “in vigorous use, with literature in a standardized form” although the standardized orthography “is not yet widespread or sustainable” (Eberhard et al. 2019: [zab]).⁴ UNESCO, on the other hand, categorizes the Zapotec languages of the Central Valleys as “severely endangered,” which is intended to mean that the “language is spoken by grandparents and older generations; while the parent generation may understand it, they do not speak it to children or among themselves” (Moseley 2010). Ultimately, however, both of these classifications are rather misleading, as language vitality varies significantly between individual towns in the region. In San Bartolomé Quialana, for example, children continue to learn Zapotec (Brook Lillehaugen, p.c. June 2019), while in Tlacolula de Matamoros there are no speakers under the age of 60 (Lillehaugen 2006: 8).

In San Jerónimo Tlacoahuaya, the youngest fluent Zapotec speaker is in his early 40s, although some children have passive knowledge of the language. A town report published in 2011 reported 833 Zapotec speakers in Tlacoahuaya, about 36% of the total population (Martínez Hernández 2011). To my knowledge, all Tlacoahuaya community members speak Spanish; some also speak English. While Zapotec is the primary language of use in some homes and can be heard in the Tlacoahuaya market, it is mainly restricted to these informal, domestic contexts. Spanish is the dominant language in business, education, and government; in 2019, none of the cabildo (town council) members spoke Zapotec, and this is

⁴To my knowledge, literature in Tlacolula Valley Zapotec is rare, certainly not widespread. Exceptions include tweets, in particular by @BnZunni (Tlacoahuaya Zapotec) and @DizhSa (San Lucas Quiavini Zapotec). Additionally, Felipe H. Lopez has published poetry and essays in San Lucas Quiavini Zapotec (e.g. Lopez 2018).

typical.

In the past decade, there have been several language maintenance projects in Tlacoahuaya (see further discussion in García Miranda 2014). Between 2013 and 2014, Moisés García Guzmán and Edgar Ángeles Ángeles published a series of pedagogical YouTube videos on Tlacoahuaya Zapotec (e.g. BnZunni 2013). As of 2019, García Guzmán, in collaboration with the Tlacoahuaya cabildo, is running two Zapotec language classes (one for children and one for adults) which meet weekly. García Guzmán has also been active in tweeting in Tlacoahuaya Zapotec (under the handle @BnZunni), including participation in the Voces del Valle project (Lillehaugen 2016).

1.4.2 Previous research on Tlacoahuaya Zapotec

Tlacoahuaya Zapotec has not been formally studied by linguists in the past several decades. The only modern linguistic work on this language is Rendón’s phonological sketch from 1970. As mentioned above, García Guzmán and Ángeles Ángeles have produced some digital pedagogical materials; there is also an online dictionary, which as of April 9, 2020, contains 1,468 audio files (Lillehaugen et al. 2019b). The documentary *Dizhsa Nabani* (García Guzmán et al. 2018) includes significant lengths of Tlacoahuaya Zapotec speech, as well as in-depth discussions about the cultural importance of language in the town. However, my own recent pilot studies form the only holistically-focused documentation project on Tlacoahuaya Zapotec in the past century.

Some other Tlacolula Valley Zapotec languages have been documented and described to a greater extent. Notable in this body of research is work on San Lucas Quiaviní Zapotec (see for example Chávez Peón 2010; Munro & Lopez 1999; Munro et al. 2007; Uchihara & Pérez Báez 2016) and Teotitlán del Valle Zapotec (Gutiérrez 2014; Lowes & Lopez Cruz 2007; Uchihara & Gutiérrez 2019). Much of this research focuses on phonology, with some work on syntax. Unfortunately, there are very few publicly available primary data sources for any Tlacolula Valley Zapotec language.

There is, however, substantial documentation of Colonial Valley Zapotec, the Central Zapotec language attested in a set of late 16th- through early 19th-century documents writ-

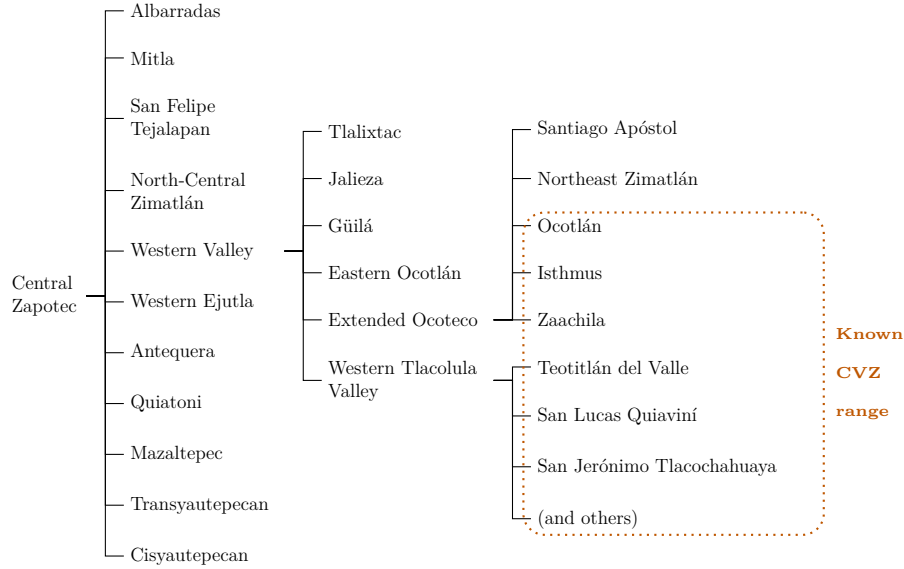


Figure 1.2: Linguistic range of Colonial Valley Zapotec texts with regard to modern Western Valley Zapotec languages (see Foreman & Lillehaugen 2017; Smith-Stark 2007)

ten in the Valley of Oaxaca (see Lillehaugen et al. 2016).⁵ Colonial Valley Zapotec is generally considered to represent a variety of Western Valley Zapotec, as documents in this language were written in regions where both Tlacolula Valley and Extended Ocoteco languages are currently spoken (see Fig. 1.2; note the distinction between Western Valley Zapotec and Western *Tlacolula* Valley Zapotec). While the exact classification of Colonial Valley Zapotec remains unclear — it may even have represented a pre-colonial lingua franca that no longer exists — it is certainly *socially* related to the language spoken in San Jerónimo Tlacochahuaya during the Mexican colonial period, as Cordova was living in Tlacochahuaya when he wrote his Colonial Valley Zapotec grammar (1578a) and dictionary (1578b).⁶ Colonial documents written in Tlacochahuaya, such as the last will and testament of Sebastiana de Mendoza (see Munro et al. 2019; Plumb 2019a) are of particular cultural and linguistic importance. Recently, Colonial Valley Zapotec grammar has been the topic of several linguistic studies (e.g. Anderson & Lillehaugen 2016; Foreman & Munro 2007; Smith-Stark 2008).

⁵The Colonial Valley Zapotec corpus consists of a few hundred handwritten administrative documents, as well as various religious documents produced under the auspices of the Catholic church.

⁶Cordova’s *Arte* was digitized by the John Carter Brown Library and can be viewed and searched via the Ticha Project (Lillehaugen et al. 2016). His *Vocabulario* can be searched on Oudijk & Miceli’s (2015) online portal.

	Bilabial		Lab. dent.	Alveolar		P-alveo.		Retroflex		Palatal	Velar	
Plosive	p	b		t	d						k	g
Nasal	(mm)	m		(nn)	n					ɲ	(nng)	ng
Fricative			{f}	s	z	sh	zh	sh:	zh:		j	
Affricate				ts						ch	dzh	
Trill					rr							
Tap					r							
Approx.										y		w
Lat. appr.				(ll)	l							

Figure 1.3: Tlacoahuaya Zapotec consonant inventory (segments in parentheses are more tentatively phonemic; segments in curly brackets are found only in loan words)

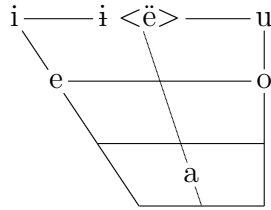


Figure 1.4: Tlacoahuaya Zapotec vowel inventory

1.4.3 Brief grammatical sketch

1.4.3.1 Phonology

My preliminary investigation into Tlacoahuaya Zapotec phonology indicates that it is quite similar to the phonology of San Lucas Quiaviní Zapotec, as described in Chávez Peón 2010 (see also Munro & Lopez 1999). My proposed consonant inventory is shown in Fig. 1.3, using the practical orthography which I will use in this paper.⁷ Plosives, nasals, and fricatives have a fortis-lenis distinction. Word-final glides surface as highly reduced, voiceless segments.

The Tlacoahuaya Zapotec vowel inventory is shown in Fig. 1.4. As shown in (2), Tlacoahuaya Zapotec seems to have four phonation types: modal (*a*), breathy (*ah*), creaky (*a'*), and interrupted (*a'a*).⁸

⁷This consonant inventory is quite similar to the one proposed by Rendón (1970), with the major differences being that Rendón did not include retroflex fricatives but did include phonemic labialized velar plosives.

⁸Nomenclature following Chávez Peón 2010.

- (2) Tlacoahuaya Zapotec phonation types (see entries in Lillehaugen et al. 2019b)
- | | | |
|--------------|----------------------------------|--|
| Modal: | [lat̚] <i>lat</i> ‘tin can’ | [bez̚] <i>bez</i> ‘newborn’ |
| Breathy: | [la̤t̚] <i>laht</i> ‘place’ | [be̤z̚] <i>behz</i> ‘pit (of a fruit)’ |
| Creaky: | | [be̤z̚] <i>be’z</i> ‘tiger’ |
| Interrupted: | [laʔats̚] <i>la’ats</i> ‘valley’ | |

I have not yet observed clear evidence for a phonemic contrast between creaky and interrupted vowels. Rendón (1970) noted that vowels pronounced as creaky (“laringealizada”) in rapid speech were often pronounced as interrupted (“dos vocales iguales separadas por un cierre glotal”) in slower speech. As I have observed both creaky and interrupted vowels in the slower speech context of lexical elicitation (and as a distinction between these two phonations is proposed for Quiavini Zapotec), I continue to represent them as distinct in my orthography.

Like other Zapotec languages, Tlacoahuaya Zapotec is tonal. Rendón (1970) identified three contrastive tones: high, rising, and low (“alto”, “ascendente”, “neutro”). I have additionally found evidence of a contrastive falling tone, which is in agreement with Chávez Peón’s (2010) analysis of tone in San Lucas Quiavini Zapotec. Examples of each tone are shown in (3).⁹

- (3) Tlacoahuaya Zapotec tones (see entries in Lillehaugen et al. 2019b)
- | | | | |
|---------|----------------------------------|----------|------------------------------|
| High: | [ʒiʔi̯] <i>zhi’i</i> ‘cold, flu’ | Low: | [ʒiʔi̯] <i>zhi’i</i> ‘nose’ |
| Rising: | [ʒilj̥] <i>zhily</i> ‘cotton’ | Falling: | [ʒilj̥] <i>zhily</i> ‘sheep’ |

However, my analysis of Tlacoahuaya Zapotec tone is still in very preliminary stages, and for the purposes of this paper I will not be representing tone orthographically.

1.4.3.2 The verbal template

Tlacoahuaya Zapotec marks TAM categories via prefixes on the verb, as shown in (4a); these prefixes are discussed further in §1.4.4. Historically, Zapotec verb roots tend to be intransitive with stems of higher valency being built using (now, mostly unproductive)

⁹Chávez Peón (2010: 12) notes that in Quiavini Zapotec, high tone does not occur on breathy vowels and rising tone *only* occurs on modal vowels; combinations of phonation and tone are also restricted in Teotitlán del Valle Zapotec (Uchihara & Gutiérrez 2016, 2019). I have not yet investigated this in Tlacoahuaya Zapotec, but it is quite likely that similar restrictions apply.

causative prefixes, as in (4b). Verb stems may also include movement auxiliaries, as in (4c).

- (4) a. No derivational morphology
nis ka-ndyeby
 water PROG-boil(INTR)
 ‘The water is boiling.’ (elic;SJTZverb19-13: 5:00)
- b. Causative prefix
Jwany i-sa-ndyeby nis
 Juan POT-CAUS-boil water
 ‘Juan will boil the water.’ (elic;SJTZverb19-13: 6:33)
- c. Movement auxiliary
Jwany b-ed-nda’a gehll
 Juan COMP-come-harvest corn
 ‘Juan came [here] and harvested corn.’ (const;SJTZverb19-14: 9:55)

Clausal negation is expressed via the clitics *këdy=* and *=ti*, as in (5).

- (5) *donn këdy= sa= nye-dzhib =ti =nu*
 1PL NEG= even= CTFL-be.scared =NEG =1PL
 ‘We didn’t even get scared.’ (txt;sustol1: 9:51)

The categorial status of Zapotec “clitics” is unresolved. Beyond the TAM-verb stem unit, there is little evidence for a well-defined “word” (Gutiérrez et al. 2019). However, the position and boundedness of the verbal accoutrements are frequently described in terms of a verbal template made up of clitics and affixes, as shown in (6) for Teotitlán del Valle Zapotec.

- (6) Teotitlán del Valle verbal template (Gutiérrez 2014)
 NEG= tam- AUX- CAUS- **root**+stem -APPL =ADV =NEG =SUBJ =OBJ

Tlacoahuaya Zapotec appears identical to the verbal template to Teotitlán Zapotec, and for the purposes of this paper I mark clitics and affixes as given in (6).

1.4.3.3 Syntax

Most Zapotec languages have VSO basic word order, with pre-verbal focus and topic slots (see e.g. Bueno Holle 2019). Tlacoahuaya Zapotec conforms to this generalization,

with VSO appearing in continuous speech, as in (7), but SVO order being common in elicitation contexts, as in (4b) above. Subject pronouns appear as enclitics on the verb, as in (5) above, and object pronouns may encliticize onto subject pronouns, as in (8) below.

(7) VSO word order

<i>bel</i>	<i>a</i>	<i>b-yene</i>	<i>běny</i>	<i>de</i>	<i>leyu</i>	<i>pwes</i>	<i>a</i>	<i>b-yene</i>	<i>běny</i>
if	already	COMP-keep	person	PL	field	well	already	COMP-keep	person
		VERB	SUBJ	OBJ				VERB	SUBJ
	<i>de</i>	<i>leyu</i>							
	PL	field							
	OBJ								

‘If people kept the fields, well, people kept the fields’ (txt;[abasolo](#): 5:10)

(8) Subject and object enclitics

<i>r-ats</i>	<i>=a</i>	<i>=ni</i>
IMPF-tell	=1SG	=3SG.INFRM
VERB	SUBJ	OBJ

‘I told him’ (txt;[susto1](#): 9:08)

Tlacoachahuaya Zapotec follows the typological patterns associated with VO or head-initial languages. Adjectives (9) and demonstratives (10) follow the nouns they modify, and adpositions (which are derived from body part words) precede nouns (11).

(9)	<i>Biub</i>	<i>yu’úsh</i>	<i>r-ia</i>	<i>tuvzila</i>	<i>lo</i>	<i>yz</i>
	ant	old	IMPF-come.out	once	in(‘face’)	year
	NOUN	ADJ				

‘The old chicatana ants come out once a year.’ (txt;[BnZTweet](#): 14 May 2018)

(10)	<i>iz</i>	<i>re’</i>	<i>i-chu’u</i>	<i>grate</i>	<i>deni’ñ</i>
	year	this	IRR-change	all	3PL.INAN
	NOUN	DEM			

‘this year all of them will change’ [speaking of town council committees] (txt;[cabildo](#): 2:54)

(11)	<i>Běn</i>	<i>Za</i>	<i>r-qui’i</i>	<i>garbanz</i>	<i>lo</i>	<i>zēli</i>
	person	Zapotec	IMPF-roast	garbanzo.bean	on(‘face’)	comal
					PREP	NOUN

‘Zapotec people roast garbanzo beans on the comal.’ (txt;[BnZTweet](#): 27 Feb 2018)

Numbers in Tlacoachahuaya Zapotec precede the nouns they modify (12), as does the optional plural marker *de* (13).

- (12) *r-ak* *elejir* *chonn* *bnyeti*
 IMPF-do choose three people
 NUM NOUN

‘Three people are chosen.’ (txt;cabilo: 1:16)

- (13) *chiru* *r-gab* *de* *voto*
 then IMPF-count PL vote
 PL NOUN

‘Then the votes are counted.’ (txt;cabilo: 1:38)

With this background, I will now expand on the focus of this paper: the TAM morphology.

1.4.4 TAM morphology

I have identified nine TAM categories in Tlacoachahuaya Zapotec, as outlined in Table 1.2. The Stative, Z-Progressive, and Ø-Progressive appear only on a limited set of verbs. The descriptions provided here are impressionistic, based on elicitation.

It is typical in the Zapotecanist literature to divide verbs into classes based on the

My Gloss	Surface-level description	Allomorphs
Imperfect	situation occurs habitually	<i>r-</i>
Progressive	situation is ongoing	<i>ka(y)-</i>
Completive	situation has finished/ended	<i>b(d)-</i> , <i>u(d)-</i> , <i>g-</i> , labialization
Potential	situation has not yet occurred	<i>i-</i> , <i>g-</i> , <i>ch-</i> , high tone
Future	situations will definitely occur	<i>ze-</i>
Counterfactual	situations was supposed to occur but didn’t/won’t	<i>ny(e)-</i> , <i>nyet-</i> , <i>nyeg-</i>
Stative	situation is ongoing (stative verbs)	<i>n(a)-</i>
Z-Progressive	situation is ongoing (motion verbs)	<i>z-</i>
Ø-Progressive	situation is ongoing (positional verbs)	<i>Ø-</i>

Table 1.2: Tlacoachahuaya Zapotec TAM prefix inventory, with imperfective categories marked in orange

	Class A	Class B	Class C	Class D
Potential	*/ki-/	*/ki-/	*/k-/	*/k-/
Completive	*/kwe-/	*/ko-/	*/ko-/	*/ko-/ (with stem changes)

Table 1.3: Kaufman’s Proto-Zapotec(an) verb classes (1993/2016: 75; see also Smith-Stark 2008)

Class	IMPF	PROG	COMP	POT	CTFL	Notes
A:cons	r-	ka-	b- ~ u-	i-	nye-	stems are consonant-initial
A:non-cons	r-	ka-*	b-	ʔ-	nye-*	stems begin <i>y</i> ; *stem vowel changes <i>e</i> > <i>a</i>
B:k	r-	ka-	[+labial]	i-	nye-	stems begin with <i>k</i>
B/C:voc1	r-	kay-	g-*	g-	nyeg-*	stems are vowel-initial; *stem vowel becomes <i>u</i> in COMP, deletes in CTFL
B/C:voc2	r-	kay-	bd- ~ ud-	g-	nyet-	stems are vowel-initial
C	r-	ka-	b- ~ u-	ʔ-*	nye-	almost all stems begin with <i>z</i> - *fortition of initial consonant in POT
D:b	r-	ka-	u-*	g-*	nye-*	stems begin with <i>b</i> ; *stem-initial <i>b</i> deletes or becomes an approximant in COMP and POT, becomes <i>t</i> in CTFL
D:g	r-	ka-	u-*	ʔ-*	nye-*	stems begin with <i>g</i> ; *stem-initial <i>g</i> becomes <i>t</i> in COMP and CTFL
CH	r-	kay-	u- or g-	ch-	ny-	stems are vowel-initial

Table 1.4: Morphological verb classes in Tlacoahuaya Zapotec

allomorphs of their TAM prefixes, following the four Proto-Zapotec(an) verb classes reconstructed in Kaufman 1993/2016 (see Table 1.3). Based on my preliminary research, Tlacoahuaya Zapotec verbs should be divided into nine morphological classes. These classes are outlined in Table 1.4; asterisks indicate stem changes, noted in the right-hand column. I have named the Tlacoahuaya Zapotec verb classes based on their correspondence to verb classes in related languages (e.g. Gutiérrez 2014; Pérez Báez & Kaufman 2016; Smith-Stark 2002).

As in other Zapotec languages, the Tlacoahuaya Zapotec verb classes are primarily distinguished based on the form of the Completive and the Potential. Closely related languages, including Teotitlán del Valle Zapotec (Gutiérrez 2014) have separate A and B

classes for consonant-initial roots; in Tlacoahuaya Zapotec these have collapsed into one class, A:cons. The Tlacoahuaya CH class cannot be immediately related to verb classes in other languages. The identifying feature, *ch-* as a realization of the Potential, is not reported in either Teotitlán del Valle Zapotec (Gutiérrez 2014) or Chichicapan Zapotec (Smith-Stark 2002). A cognate form is found in San Lucas Quiaviní Zapotec (Munro & Lopez 1999; see entry for *rèe'cy* ‘gets burned, burns’), but no verb class analysis is available for that language.

The verbs in Tlacoahuaya classes A:cons, B/C:voc2, and C, are reported (in elicitation) to have free variation in the Completive form between *b-* and *u-*, except in cases of particular phonotactic clashes (e.g. a *b*-initial stem). I have not yet been able to verify this free variation in naturalistic speech. For verbs in classes A:non-cons, C, and D:g, I observe the Potential form is marked by high tone on the stem.

Armed with a preliminary understanding of the *form* of the Tlacoahuaya Zapotec TAM categories, we can move on to investigating the *function*. In this paper, I describe only a sliver of Tlacoahuaya’s TAM system, focusing entirely on the imperfective categories. In Chapter 2, I use the marking of ongoing situations as a window into the shape of the Tlacoahuaya Zapotec imperfective space.

Chapter 2

The structure of the Tlacoahuaya Zapotec imperfective space

2.1 Introduction

As Whorf argues in his famous analysis of Hopi (1938), we should not assume that the most natural way to analyze a language’s TAM system will conform to our preconceived notions of tense, aspect, and modality. However, it is necessary to start with some assumptions in order to begin probing the system. In this paper, I assume that “imperfective” is a relevant notion to apply to the Tlacoahuaya Zapotec TAM system, and more specifically that it is an appropriate label for the five TAM categories that I discuss in this section. Drawing terminology from Deo (2015), I understand imperfective situations to include: (i) characterizations (i.e. habituais and generics); (ii) states; and (iii) events-in-progress. Within this, states and events-in-progress may be summarized as “ongoing” situations.

Characterizations (including both habituais and generics) are uniformly marked by the Tlacoahuaya Zapotec Imperfect (*r-*). The case of ongoing imperfectives is more complicated, however. Five different Tlacoahuaya Zapotec TAM categories are attested marking ongoing situations, and in fact Tlacoahuaya Zapotec verbs may be divided into five classes based on which TAM category is used to express an ongoing situation involving that verb.¹

¹This relationship between imperfective-marking and semantic class is not unusual. In English, for example, we can come up with many different ways of to express ongoing events, with specifications ranging from semantic class (e.g. states taking the copula in the Simple Present, *Sarah is tall*, and events taking the Present Progressive, *Sarah is playing basketball*) to genre (e.g. the Sports Announcer Present, *She shoots, she scores!*).

Examples are outlined below in (14); I have named the classes based (impressionistically) on their general semantics.

- (14) a. Property-denoting statives (*n(a)-*)
n-dyo'o bēdingul
 ST-be.fat turkey
 'The turkey is fat.' (elic;SJTZverb19-25: 4:08)
- b. Positional verbs (no overt morphology)
retrat zaby lo pader
 photo be.hanging on('face') wall
 'The photo is on the wall.' (elic;SJTZverb19-23: 6:38)
- c. Experiential statives (*r-*)
Jwany r-biz+la'z
 Juan IMPF-be.thirsty(dry.out+heart)
 'Juan is thirsty.' (elic;SJTZverb19-5: 44:23)
- d. Deictic motion verbs (*z-*)
Jwany z-e ndu'a
 Juan ZPROG-go Oaxaca
 'Juan is going/went to Oaxaca [on his way]' (elic;SJTZverb19-21: 0:51)
- e. Event verbs (*ka-*)
kay-u'n bdo
 PROG-cry baby
 'The baby is crying.' (elic;SJTZverb19-25: 19:34)

Property-denoting statives (often called simply “statives”), positional verbs, and deictic motion verbs have been identified as meaningful semantic/syntactic verb classes in other Zapotec languages. What I call “event verbs” are typically viewed as the default. To my knowledge, the verb class I call “experiential statives” has not been discussed in the Zapotecanist literature. Most discussions of Zapotec verbs have focused exclusively on the morphological classes discussed in §1.4.4. I propose imperfective-marking can be used as a primary organizational strategy to semantically categorize Tlacoahuaya Zapotec verbs. In the following sections, I present early evidence on the semantics of each category, but further research into the details of their semantics is necessary. Data in this section comes primar-

<i>a</i>	‘be’	<i>anda</i>	‘be bitter’
<i>a’a</i>	‘be heavy’	<i>zhěny</i>	‘be wide’
<i>dyo’o</i>	‘be fat’	<i>nda’a</i>	‘be harvested, harvest’
<i>alda</i>	‘be hot’		

Table 2.1: List of Tlacoahuaya Zapotec property-denoting statives

ily from a set of elicitation sessions conducted in June 2019 with Moisés García Guzmán that focused on translating English and Spanish sentences denoting ongoing imperfective situations.

2.2 Property-denoting statives

A restricted set of Tlacoahuaya Zapotec verbs take the Stative *n(a)-* to mark ongoing situations, as in (15). I tentatively characterize these verbs as statives which denote properties.

- (15) a. *n-dyo’o* *bědingul*
ST-be.fat turkey
‘The turkey is fat.’ (elic;SJTZverb19-25: 4:08)
- b. *na-zhěny* *nez*
ST-be.wide road
‘The road is wide.’ (elic;SJTZverb19-25: 32:53)

One example of the Stative, on the verb *nda’a* ‘be harvested, harvest’, was translated into English with a passive construction; however, it’s possible that this is better interpreted as a result state.

- (16) *zhi* *n-nda’a* *gehl*
tomorrow ST-be.harvested corn
‘Tomorrow, corn will be harvested’ (constr;SJTZverb19-8: 1:14)

A full list of the Tlacoahuaya Zapotec verbs I have identified as property-denoting statives is shown in Table 2.1. While there are almost certainly several more verbs in this class, we can expect it to be a relatively small group.

In related languages, cognates of *n(a)-* are typically attested only on a discrete set of verbs, although the size of this class varies. For example, Bueno Holle 2019 finds that the Isthmus Zapotec Stative occurs on about half of Isthmus Zapotec verb roots to form a “stative verb” (see also Pickett 1955). As shown in (17), examples (drawn from Bueno Holle’s appendix) indicate that the Isthmus Zapotec Stative appears on verbs denoting properties.

(17) Isthmus Zapotec (Bueno Holle 2019)

- a. *nabé* ***na***–*lasé*=*bě*
 very ST–thin=3SG.HUM
 ‘he was very thin’ (p. 144)
- b. *cădi* ***na***–*da’na’* *endaro’* *xa*
 NEG ST–tempt food INTERJECTION
 ‘food wasn’t appetizing’ (p. 168)

On the other hand, Beam de Azcona 2004 finds that the Coatlán-Loxicha (Macro-Coatecan) Zapotec Stative is unproductive, appearing on just one verb, *ăk* ‘become’ (see §4.3.3).

2.3 Positional verbs

Tlacoachahuaya Zapotec has a class of positional verbs which describe the position and orientation of an object (the Figure) in relation to a Ground; when these verbs are describing an ongoing situation, they appear without overt TAM morphology, as in (18).

- (18) a. *retrat* ***zaby*** *lo* *pader*
 photo be.hanging on(‘face’) wall
 ‘The photo is on the wall.’ (elic;SJTZverb19-23: 6:38)
- b. *be’ekw* ***zub*** *lo* *měx*
 dog be.sitting on(‘face’) table
 ‘The dog is on the table.’ (elic;SJTZverb19-23: 8:19)

Positional verbs have been previously recognized as a formal class of verbs in other Zapotec languages (see Beers 2010; Foreman & Lillehaugen 2013, 2017) and in Otomanguean languages in general. These verbs usually select for specific properties of either the Figure

or the Ground, in addition to specifying a particular orientation. As outlined in Foreman & Lillehaugen 2013, Zapotec positional verbs can participate in Basic Locative Constructions, Existential Constructions, and some Genitive Constructions (among other contexts); examples are given below from San Lucas Quiaviní Zapotec, a variety closely related to Tlacoachahuaya Zapotec.

(19) San Lucas Quiaviní Zapotec (Central, Tlacolula Valley; Foreman & Lillehaugen 2013)

a. Basic Locative Construction

Bote'ij zuu guë'ëhcy gyiahah
 bottle NEUT.stand head/on rock

‘The bottle is on the rock.’ (p. 10, ex. 22)

b. Existential Construction

Yahg zòob do'ohby ru'uh x:-chu' guë'ëhzy
 tree NEUT.sit whole mouth/at.edge.of POSS-perimeter pueblo

‘There are trees around the edge of the pueblo’ (p. 10, ex. 28)

c. Genitive Construction

Que'ity nu'=di' rsu'ahnn bèè'll
 NEG NEUT.be.located=NEG rattle snake

‘The snake doesn’t have rattles’ (p. 14, ex. 61)

Similar to my findings in Tlacoachahuaya Zapotec, positional verbs across the Zapotec family tend to have an unmarked form to indicate ongoing situations; examples are given below for in San Lucas Quiaviní Zapotec (20) and Macuiltianguis Zapotec (21). This unmarked form contrasts, for example, with the *r*-marked form which has different semantics.

(20) San Lucas Quiaviní Zapotec (Central, Tlacolula Valley; Foreman & Lillehaugen 2013)

a. *càa*

NEUT.stick

‘is stuck, is hanging’

b. *r-cah*

HAB-stick

‘is on a tree (of fruit)’

(21) Macuiltianguis Zapotec (Northern; Foreman & Lillehaugen 2013)

- a. *yù'ú*
ST/be.contained
'is inside'
- b. *r-ù'ú*
HAB-be.contained
'gets inside'

While *zub* 'be sitting' and *zaby* 'be hanging' are the only positional verbs I have specifically documented in Tlacoahuaya Zapotec, based on the overview of Central Zapotec positional verbs in Foreman & Lillehaugen 2013, I expect there to be at least ten.

2.4 Experiential statives

I have identified fourteen Tlacoahuaya Zapotec verbs that take the Imperfect *r-* to mark an ongoing situation. A full list of these verbs — which I tentatively term “experiential statives” — is shown in Table 2.2. As I will discuss in §3.3, the Imperfect sometimes appears in alternation with the Progressive to mark events-in-progress in narrative. However, this set of experiential statives specifically take the Imperfect as a *default* category, in elicitation contexts, to mark an ongoing interpretation. As I will discuss below, the use of the Progressive on these verbs was judged to be either ungrammatical or somehow marked.

I have not seen this group of verbs explicitly discussed in the Zapotec literature. I call these verbs “experiential statives” in an attempt to characterize non-agentive, psycho-

<i>ilu</i>	'think'	<i>ndyeny</i>	'be hungry'
<i>ka'z</i>	'want'	<i>zak la'z</i>	'be happy'
<i>u'u garza'a</i>	'have worry'	<i>a'asy</i>	'sleep, be asleep'
<i>un perdon</i>	'forgive (make pardon)'	<i>ubikia</i>	'snore (do + sound + head)'
<i>ak x:u</i>	'be sick [have sickness]'	<i>ubitëx</i>	'purr (do + sound + head)'
<i>ak gidzhiu</i>	'have a cough'	<i>se'es</i>	'shake'
<i>bizla'z</i>	'be thirsty'	<i>niby</i>	'move'

Table 2.2: List of Tlacoahuaya Zapotec experiential statives

logical nature of most of the meanings. One clear subset of this class are verbs denoting cognitive/attitudinal states, such as ‘think’ and ‘want’ in (22).

- (22) a. *r-ilu=a* *Jwany* *i-nda’a* *gehll* (*zhi*)
 IMPF–think=1SG Juan POT–harvest corn tomorrow
 ‘I think Juan will harvest corn tomorrow’ (elic;SJTZverb19-3: 16:41, 16:55)
- b. *Jwany* *r-ka’z* *i-nda’a* *gehll*
 Juan IMPF–want POT–harvest corn
 ‘Juan wants to harvest corn.’ (elic;SJTZverb19-3: 0:26)

Another subset is those verbs which denote bodily states like ‘be thirsty’ or ‘be sick’ (23) and verbs which denote emotion, like ‘be happy’.

- (23) a. *Jwany* *r-biz+la’z*
 Juan IMPF–be.thirsty(dry.out+heart)
 ‘Juan is thirsty.’ (elic;SJTZverb19-5: 44:23)
- b. *Jwany* *r-ak* *x:u*
 Juan IMPF–be sick
 ‘Juan is sick.’ (spon;SJTZverb19-5: 31:00)

Other verbs in this class, notably *a’asy* ‘sleep’ and *ubikia* ‘snore’ (24), would be categorized as activities (atelic events) in English.

- (24) a. *r-a’asy* *bdo* *ee* ?
 IMPF–sleep baby Q.Y/N
 ‘Is the baby sleeping?’ (elic;SJTZverb19-22: 2:20)
- b. *r-u+bi+kia* *bēny*
 IMPF–snore(do+sound+head) person
 ‘The man is snoring’ (elic;SJTZverb19-25: 18:51)

These activities seem to have an involuntary connotation, although not all involuntary activity verbs fall into this class (see e.g. *yo lay* ‘chatter (of teeth)’, (29d) on page 26).

For some verbs in this class, speakers rejected a form marked with the Progressive (*ka(y)-*) as ungrammatical; for example, the hypothetical form *kaya’asy* of *a’asy* ‘sleep’ was rejected. In other cases, however, when asked to contrast the Imperfect-marked and the

Progressive-marked forms, a speaker interpreted the Progressive-marked experiential statives with an intensifying reading. For example, (25a) was interpreted as expressing an intense thirst and (25b) as expressing that the sickness is in its early stages and is worsening.²

- (25) a. *Jwany ka-biz+la'z*
 Juan PROG-be.thirsty(dry.out+heart)
 ‘Juan is really thirsty.’ (spon;SJTZverb19-5: 45:02, 45:55) (cf. (23a))
- b. *Jwany kay-ak x:u*
 Juan PROG-be sick
 ‘Juan is getting sick.’ (constr;SJTZverb19-5: 31:18) (cf. (23b))

These interpretations, however, should be treated with caution, as I have not discussed them with speakers in detail or verified them in naturalistic speech.

In general, this class of verbs requires much additional research to determine any syntactic constraints and to better define the semantics of the class in comparison to property-denoting statives and event verbs.

2.5 Deictic motion verbs

The verbs *e* ‘go’ and *ed* ‘come’ in Tlacoahuaya Zapotec take a unique TAM category, the Z-Progressive (ZPROG), as shown in (26). I follow Anderson 2019 in calling these “deictic motion verbs”.

- (26) a. *Jwany z-e ndu'a*
 Juan ZPROG-go Oaxaca
 ‘Juan is going/went to Oaxaca [on his way]’ (elic;SJTZverb19-21: 0:51)
- b. *z-ed Jwany*
 ZPROG-come Juan
 ‘Juan is coming’ (elic;SJTZverb19-14: 15:10)

²“For example, a flu or a cold, when you’re getting the first symptoms, then that would be a good scenario where you can use *kayak x:u*” (SJTZverb19-5: 31:4331:58).

Based on descriptions of the Z-Progressive in related languages, it is likely that there is also a special ‘go home’ verb which I have not yet documented in Tlacoahuaya Zapotec.

I have not yet investigated the semantic properties of these verbs in Tlacoahuaya Zapotec, however, in other Zapotec languages, these verbs have been found to have a “round-trip” property; that is, in the case of ‘go’, the traveler must return to their point of origin/the place of locutionary action in order for the event to be complete. For example, Speck & Pickett 1976 analyzes the Texmelucan Zapotec (Popolocan) verbs ‘go’ and ‘come’ as having this property. In (27a), where the Texmelucan verb ‘go’ is marked with the Completive, the agent, Policarpo, is understood to have returned to his origin. On the other hand, in (27b), although the long time period indicates he must have arrived at San Lorenzo, the verb is marked with the Progressive because he hasn’t returned to his origin yet.

(27) Texmelucan Zapotec (Speck & Pickett 1976)

- a. *Karp* *bi* *byay* *škeey*
 Policarpo already COMP.go.he San Lorenzo

‘Policarpo already went to San Lorenzo.’ [he has returned] (p. 61, ex. 15)

- b. *gutiiny* *ǰi* *ya* *Karp* *škeey*
 COMP.fifteen day PROG.go Policarpo San Lorenzo

‘Policarpo went to San Lorenzo fifteen days ago.’ [he hasn’t returned yet] (p. 61, ex. 16)

My literal translation: ‘It has been fifteen days that Policarpo has been going to/on his trip to San Lorenzo.’

The analysis in Speck & Pickett 1976 assumes that this round-trip quality in Texmelucan Zapotec is due to verbal semantics. In an analysis of San Lucas Quiaviní Zapotec (Central; Tlacolula Valley), however, Anderson 2019 instead proposes that the round-trip interpretation is due to the semantics of the Z-Progressive category. In particular, the Quiaviní Zapotec data demonstrate that a round-trip interpretation does not always arise when deictic motion verbs are marked with other TAM categories. This is demonstrated in (28), where the Perfective is used despite the round-trip journey not being complete.

(28) San Lucas Quiavini Zapotec (Anderson 2019)

gw-e xtadmam=a ladi lo 1983
 PFV-go grandfather=1SG side in 1983

‘My grandfather went to the US in 1983.’ (slide 23)

Context: he died there without ever returning.

Anderson 2019 assumes that the round-trip interpretations must stem from the TAM category itself; in this analysis, the Z-Progressive requires that a result state of the predicate be true at topic time. Further research is needed to determine the round-trip interpretation effects in Tlacoachahuaya Zapotec.

2.6 Event verbs

This final category contains all the verbs *not* included in any of the former categories; ongoing situations described by these verbs are marked with the Progressive *ka(y)-*, as in (29). This is by far the largest category of verbs and is typically treated as the default in other Zapotec languages.

(29) a. *ka-zh:u’uny una*
 PROG-run woman

‘The woman is running’ (elic;SJTZverb19-25: 47:18)

b. *zhi skan ka-nda’a=a gehll*
 tomorrow at.this.time PROG-harvest=1SG corn

‘At this time tomorrow, I will be harvesting corn.’ (spon;SJTZverb19-8: 4:26)

c. *ka-ga pxit gëdzh*
 PROG-expand tangled maguey.fiber

‘The maguey sponge is expanding [filling with water].’ (const;SJTZverb19-25: 26:41)

d. *kay-o lay bdo*
 PROG-eat tooth baby

‘The baby’s teeth are chattering.’ [lit. ‘The baby is eating their teeth’] (spon;SJTZverb19-25: 30:27)

The precise semantic boundary between the class of event verbs and the class of

experiential statives is still to be determined. Some bodily states and some non-agentive activities are marked by the Progressive when describing ongoing situations (30), while other are marked by the Imperfect (31).

(30) “Event verbs” denoting bodily states

- a. *Jwany* ***ka***-*dzhag*
 Juan PROG-be.tired
 ‘Juan is tired.’ (elic;SJTZverb19-5: 49:07)
- b. *Jwany* ***ka***-*zu* *zh:u*
 Juan PROG-suffer sickness
 ‘Juan is sick.’ (elic;SJTZverb19-5: 39:20)

(31) “Experiential statives” denoting bodily states (repeated from (23))

- a. *Jwany* ***r***-*biz+la’z*
 Juan IMPF-be.thirsty(dry.out+heart)
 ‘Juan is thirsty.’ (elic;SJTZverb19-5: 44:23)
- b. *Jwany* ***r***-*ak* *x:u*
 Juan IMPF-be sick
 ‘Juan is sick.’ (spon;SJTZverb19-5: 31:00)

As event verbs seem to be the default “leftovers” category, future research should focus primarily on determining the bounds of the smaller classes.

2.7 Summary

The Tlacoachahuaya Zapotec imperfective space is divided between five TAM categories which all allow an “ongoing situation” interpretation but select for one of five matching verb classes. The semantic and syntactic restrictions on these verb classes is left for future research. In the next chapter, we will delve into a single one of these imperfective TAM categories: the Imperfect *r*-.

Chapter 3

A closer look at the Tlacoahuaya Zapotec Imperfect

3.1 Habitual/generic situations

In this chapter, I consider the Tlacoahuaya Zapotec Imperfect (*r-*), one of the imperfective TAM categories discussed in Chapter 2. My goal is to describe the distribution of this category. Ultimately, descriptions of TAM category distribution combined with lexical semantic information about verbs can help us piece together the larger system. The Imperfect *r-* is a particularly interesting case study for two reasons: (1) it appears in a wide variety of contexts in Tlacoahuaya Zapotec; and (2) the semantics of this category seem to vary significantly between different Zapotec subgroups (see Chapter 4).

I observed in Chapter 2 that the Tlacoahuaya Zapotec Imperfect *r-* is frequently used to mark characterizations, that is, habitual and generic situations, where the situation is understood to be common or repeated throughout time on a regular basis. Examples are shown in (32) and (33) below.

- (32) *Bn Zaa r-yan Yabni de bēdguidy*
people Zapotec IMPF-feed (type.of.fruit) PL chicken
'Zapotec people feed yabni fruit to chickens' (txt;[BnZTweet](#): 31 Jan 2018)

- (33) *Jwany r-gue' diza*
Juan IMPF-speak Zapotec
'Juan speaks Zapotec.' (elic;[SJTZverb18-2](#): 1:12:24)

The default interpretation of an Imperfect-marked situation is present tense, as evident in the examples above. This is consistent with the cross-linguistic generalization that unbounded situations are by default located in the present (see Smith 2008: 231). The Imperfect is also

attested marking characterizations situated in the past; in these cases, temporal reference is established either by an adverbial as in (34b) or by additional context as in (35).

- (34) a. *anre' rēnkē ba r-ba'ay=nu zhub*
 now differently now IMPF-plant.AGN=1SG corn.kernel
 ‘Nowadays, we plant corn in a different way.’ (txt;cornChange: 0:00)
 [present context reinforced with adverbial]

- b. *anski r-ba'ay=nu zhub kon gu'un*
 previously IMPF-plant.AGN=1PL corn.kernel with bull
 ‘Previously, we planted corn with bulls.’ (txt;cornChange: 0:05)
 [past context indicated with adverbial]

- (35) *ni guk=pak=iñ ze r-gwe zh-mam=a*
 REL COMP\be=really=3SG.INAN like.that IMPF-tell POSS-grandmother=1SG
dizh
 word
 ‘It was really like that that my grandmother told the story.’ (txt;40pesos: 1:08)
 [Speaker’s grandmother is dead, so interpreted as a past generic]

In my current dataset, the Tlacoachahuaya Zapotec Imperfect is not attested marking future-tense situations. This is compatible with descriptions of cognate TAM categories in San Pablo Güilá Zapotec (Lopez Cruz 1997) and Isthmus Zapotec (Bueno Holle 2019), two other Central Zapotec languages. Relatedly, the Imperfect is only attested in sentences denoting realis situations; this is also compatible with Lopez Cruz’s (1997) analysis of Güilá Zapotec.

In my elicitation, I also found the Imperfect to be incompatible with temporal adverbs which pick out very short periods of time, such as *nay* ‘yesterday’ (36). This is consistent with the usual interpretation of characterizations.

- (36) **nay r-nda'a=a gehll*
 yesterday IMPF-harvest=1SG corn

Intended: ‘Yesterday, I harvested corn [e.g. multiple times throughout the day]’
 (const;SJTZverb19-8: 8:21)

However, the Imperfect is attested with adverbs indicating frequency, such as *dubte* ‘always’ (37), or relative temporal position, such as *chi'ih* ‘before’ (38).

- (37) *dubte* *r-yeb* *nisgye*
 always IMPF-fall rain
 ‘It always rains.’ (elic;SJTZverb18-2: 5:40)

- (38) *chi’ih* *r-yeb* *nisgye*
 before IMPF-fall rain
 ‘It used to rain.’ (elic;SJTZverb18-2: 4:15)

As a summary, the Tlacoahuaya Zapotec Imperfect is attested in sentences denoting realis characterizations. This interpretation is available for all verbs in my data, and it is the default interpretation of an Imperfect-marked sentence in an elicitation context.

3.2 In-progress “experiential” situations

As outlined in more detail in §2.4, the Tlacoahuaya Zapotec Imperfect can also have an ongoing interpretation when paired with a specific class of verbs; I call these verbs “experiential statives”. This class includes cognitive verbs like *ilu* ‘think’ and bodily states like *ndyeny* ‘be hungry’.

- (39) a. *r-ilu=a* *Jwany* *i-nda’a* *gehll* (*zhi*)
 IMPF-think=1SG Juan POT-harvest corn tomorrow
 ‘I think Juan will harvest corn tomorrow’ (elic;SJTZverb19-3: 16:41, 16:55)
- b. *r-ndyeny* *be’ekw*
 IMPF-be.hungry dog
 ‘The dog is hungry.’ (elic;SJTZverb19-25: 20:06)

An analytical question here is whether this use of the Imperfect should be lumped together with the characterizations or should be interpreted to some degree as a separate TAM category. I lean towards the first analysis, and specifically I hypothesize that the ongoing interpretation of these verbs must be caused by a particular Aktionsart feature present in experiential statives. Although I do not currently have enough evidence to give a detailed description of this feature, impressionistically the experiential statives are unified by a sense of involuntary, non-agentive, more stative action.

3.3 Narration of events-in-progress

In the two previous sections, I discussed the “default” (elicitation context) interpretation of the Imperfect on various verbs. However, the category is also attested more generally marking events-in-progress in some narrative contexts. I treat these cases as separate from the ongoing experiential statives (and also outside of the default imperfective system) because (i) in these examples, the verbs which are marked with the Imperfect can also be marked with the Progressive, with a similar interpretation, and (ii) all these examples occur in a narrative context (and never in elicitation, without extreme prompting), leading me to believe they are constrained by a particular pragmatic quality. This may, however, have some relationship to the non-agentive/stative reading of Imperfect-marked experiential statives.

Some examples of narrative events-in-progress denoted by the Imperfect come from a written parable about an opossum and a coyote. In (40), for example, the verb *e'too* ‘go eat’ is marked with the Imperfect but is interpreted as an ongoing event within the topic time of the narrative. The verb *e'too* incorporates the movement verb *e* ‘go’ (§2.5) and would typically take the Z-Progressive to mark an ongoing situation.

- (40) *G-U'TI* *TUBi*, *SHI* *TUBi* *INGULBEZ* ***R-E'-TOO*** *GUI'T'UEZ*, *NEZ*
 COMP-?? one day one opossum IMPF-go-eat chilacayota road/in?
LOO'NIA
 field

‘There was a day, an opossum was going to eat chilacayota in the fields’ (txt;tlacuache)
 Original free translation: ‘Hubo un día, un tlacuache iba a comer chilacayota, por el campo,’

Additional examples of this narrative event-in-progress reading come from tweets by the account @BnZunni (a native speaker of Tlacoachahuaya Zapotec writing in an ad hoc orthography; the tweets sometimes include Spanish and/or English translations). The examples below are descriptions of contemporaneous events in Tlacoachahuaya and should be interpreted as events-in-progress. Each of these examples contain an inceptive construction involving the verb *zulo* ‘begin’; it is not clear to me at this time what effect this verb might have on the use of the Imperfect. However, comparing different tweets, we can see “free” variation between the Imperfect and the Progressive. In (41a), the inceptive is marked with the Imperfect and the main verb with the Progressive, while in (41b) both verbs are marked

with the Progressive.

- (41) a. *Ba r-zulo ca-du'nlo Biunyu'sh*
 now IMPF-begin PROG-emerge chicatana
 ‘The chicatana ants are starting to come out.’ (txt;BnZTweet: 4 June 2019)
- b. *Ba ca-zulo ca-ya'x cumin lo de nia xte de Bën*
 now PROG-begin PROG-be.harvested? cumin in PL field of PL person
Zunni
 Tlacoachahuaya
 ‘Cumin harvest is beginning now in the fields of Tlacoachahuaya.’ (txt;BnZTweet: 21 March 2019)

Similarly, in (42a) below, both the inceptive and the main verb are marked with the Imperfect, although the sentence is describing an ongoing event in the present. By contrast, in (42b), both verbs are marked with the Progressive.

- (42)
- a. *Ba r-zulo r-du'nlo be' nagats la'n Danyadoo*
 now IMPF-begin IMPF-emerge mushroom yellow in mountain
 ‘Yellow mushrooms are beginning to sprout in the mountains.’ (txt;BnZTweet: 19 June 2019)
 Original translation: ‘Yellow mushroom start to sprout in the forests / Hongo Amanita está apareciendo en las montañas’
- b. *per ba ca-zulo ca-dop beld Be' xnia la'n*
 but now PROG-begin PROG-be.gathered? ? mushroom red in
Gëch Dani
 town mountain
 ‘[It hasn’t rained well this year,] but now they are starting to gather red mushrooms in the mountain towns.’ (txt;BnZTweet: 30 July 2018)

The role of the inceptive verbs in these examples requires further analysis; however, these close pairs of sentences suggest to me that the choice between the Imperfect and the Progressive here must have some subtle pragmatic force, rather than being narrowly dictated by the semantics of the categories. @BnZunni’s translations of (42a) hint at a sort of narrative quality to the tweets. During elicitation, Tlacoachahuaya Zapotec speakers sometimes accepted the Imperfect to mark present, ongoing events if they were presented as casual observations,

for example pointing across a field at someone running while saying *rzh:u'ny una* ‘the woman runs’ (const;SJTZverb19-25: 47:29). My teachers did not report strong intuitions about the difference between Imperfect- and Progressive-marked sentences in these discussions.

These data echo the description of the Mitla Zapotec Habitual in Smith 2019; here the cognate TAM category is used in narrative to relay general imperfective events, as shown in (43), with a depictive type of interpretation.

- (43) Mitla Zapotec (Smith 2019)
r-olk-a kuyot n-aga r-bih=ni r-tehB=ni aga=ni
 HAB-scream-also coyote ST-lie HAB-turn=3SG HAB-fall=3SG lie=3SG
 ‘Screaming, that coyote was lying, turning, throwing (himself) down, lying’

This narrative use of the Imperfect is discussed further in Chapter 4, where I discuss the semantics of cognate categories across Zapotec languages. However the details of this pragmatic force are still to be determined.

3.4 Verbs introducing direct quotes

In my text corpus, the verb *ats* ‘tell, say to’ is frequently used to relate direct quotations within a story. It always appears marked with the Imperfect, as shown in the examples below.

- (44) *chi'i r-ats=a=ni “nan-e'e lia Seby ”*
 then IMPF-tell=1SG=3SG woman-DIM title.FEM Eusebia
 ‘then I told him, “[that was] the little lady Eusebia”’ (txt;sustol: 9:08)

- (45) *R-ATZ BEUg (LANi), Z-ED=,A KINSHU='A=LIUU*
 IMPF-tell coyote 3SG.INFRM ZPROG-come=1SG POT.kill=1SG=2SG.INFRM
 ‘The coyote said (to him), “I have come to kill you”’ (txt;tlacuache)
 Original free translation: ‘Le dijo el coyote (a el), vengo (yo) a matarte.’

- (46) *chiru r-ats=ni mbali “per nare’ w-ani=a tuby kanazh*
 then IMPF-tell=3SG compadre but 1SG COMP-give=1SG one basket
geht xtily ”
 tortilla Castilian

‘Then she told the compadre “but I gave [you] a basket of bread!”’ (txt;40pesos: 0:44)

This is consistent with Munro & Lopez’s (1999) analysis of the San Lucas Quiaviní Zapotec verb *re’ihpy* ‘tells (someone); asks (someone)’, which they note has no Perfective form (cognate to Tlacoahuaya Completive).¹ As shown in (47), Quiaviní Zapotec Habitual *r-* is used here in a past tense, perfective scenario.

- (47) San Lucas Quiaviní Zapotec (Munro & Lopez 1999; my glosses)
R-e’ipy=ëng Gye’eihlly xi guhc
 HAB-tell=3SG.PROX Mike what COMP.be

‘He told Mike what happened.’

Not all ‘say’ verbs appear with *r-*, however. For example the Tlacoahuaya Zapotec verb *ni* ‘talk, speak’ appears marked with the Completive in (48).

- (48) *CHI’LL gUNI MBALi, HAN GAN’BYU*
 then COMP.say compadre now ?asp-see=2SG.FORM
 ‘then the compadre said, “now you (formal sg.) see”’ (txt;tlacuache)
 Original free translation: ‘Entonces dijo el compadre, ahora vera usted’

Tlacoahuaya Zapotec verbs of speech require further research. With my current data, it is unclear whether there are specific semantics of the verb root that might affect its interaction with TAM. It is also possible that speech verbs in general interact with TAM to communicate extra-temporal pragmatic information. However, I tentatively analyze this use of the Imperfect as being distinct from the other more imperfective uses described in the previous sections.

¹They also note that *re’ihpy* is used only with third personal objects; *rnñii’* is used for other constructions.

3.5 Summary: “Imperfect” as a tentative label

As I have described in the preceding sections, the Imperfect in Tlacochohuaya Zapotec is used in a wide variety of situations; as will be discussed in Chapter 4, similar facts are echoed in other Central Zapotec languages. I therefore argue that the term “Habitual”, which has been previously applied to cognates of the Imperfect in many Central Zapotec languages, is misleading and should be replaced. While my chosen term “Imperfect” is not a perfect encapsulation of the this category’s distribution, I feel that it at least captures some of the main fluctuations in semantics. Future research on the TAM system as a whole will illuminate the precise niche of the Imperfect and likely a different label will be more suitable at that time.² However, continuing to refer to this category as “Habitual” would obscure the true nature of its semantics.

² One interesting suggestion came from the audience at the 2020 meeting of the Society for the Study of Indigenous Languages of the Americas: namely, that the Imperfect might be best analyzed as an underspecified/null TAM category, which serves to some extent as a default. While I reserve judgment for the time being, this will be an interesting consideration moving forward.

Chapter 4

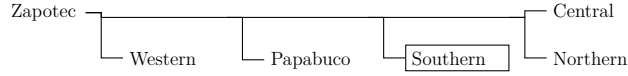
A diachronic perspective on Central Zapotec imperfectives

4.1 Proposed reconstructions of the Proto-Zapotec TAM system

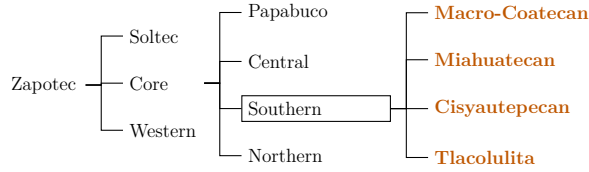
We have seen in the previous chapters that the imperfective system of Tlacoahuaya Zapotec is quite complex; imperfective marking is split between five TAM categories which each have their own intricacies. How does this system compare to imperfective-marking in other Zapotec languages? In this chapter, I bring together descriptions of imperfective TAM categories in a variety of Zapotec languages to paint a diachronic picture of Zapotec imperfectives as a whole. While current semantic descriptions of Zapotec TAM systems are not robust enough to have a clear image of the Proto-Zapotec system, in this chapter I outline some preliminary findings that could serve as a basis for future work.

Eight TAM systems from across the Zapotec language family are shown in Table 4.1; each row corresponds to a single Proto-Zapotec category as reconstructed by Kaufman (1993/2016). I take Kaufman’s phonological forms as given, as my discussion focuses on the possible semantics of these categories. While the phonological relationships between most modern TAM prefixes and the reconstructed forms is relatively easy to see, the development of the Habitual */tyi-/ into modern Habituals *r-* and *nd-* is more complex; I refer the reader to Operstein’s (2012) discussion of the evolution of Proto-Zapotec */tyi/.

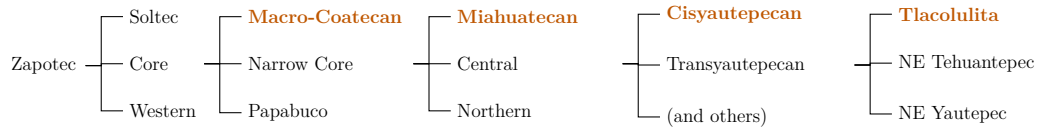
The main categories under discussion here are the imperfectives — the reflexes of Kaufman’s */tyi-/ (Habitual/Imperfect), */kkay-/ (Progressive), and */na-/ (Stative), marked in orange in the table. At a glance, we can see that while reflexes of */tyi-/ and



(a) Kaufman's classification of Zapotec languages (1993/2016: 5)



(b) Smith-Stark's classification of Zapotec languages (2007)



(c) Updated classification (see Beam de Azcona 2014, 2018; Campbell 2017)

Figure 4.1: Classification of “Southern” Zapotec languages, then and now

*/na-/ are found consistently across most the family, reflexes of the Progressive */kkay-/ are found only in Central Zapotec. A major question in the study Zapotec TAM, then, is whether this progressive category should be reconstructed to Proto-Zapotec. A key factor in this debate has been how Southern Zapotec languages are classified (see Fig. 4.1).

The Retention Hypothesis for Central Zapotec Progressive /ka/ — i.e. that */kkay-/ was a productive TAM category in Proto-Zapotec and has been lost in other branches — is implicit in Kaufman's (1993/2016) reconstruction. Kaufman's analysis was based on the classification shown in Fig. 4.1a, which includes the “Southern Zapotec” branch found in most early classifications of Zapotec languages (e.g. Smith-Stark's (2007) classification, shown in Fig. 4.1b). Based on this classification, Kaufman identifies reflexes of Proto-Zapotec(an) */kkay-/ in both Southern and Central Zapotec languages (1993/2016: 76) as well as in Chatino languages (1993/2016: 82, 1987/2004: 103); elsewhere, Kaufman has further reconstructed a Progressive */kai/ Proto-Otomanguean (1987/2004: 56, 116).

To my knowledge, the Innovation Hypothesis — in which the Progressive /ka-/ is a

defining innovation of the Central Zapotec subgroup¹ — was first proposed in Smith-Stark 2004. In this analysis, Smith-Stark used the classification in Fig. 4.1b, and the main motivation for questioning the Rentention Hypothesis was that Cordova 1578a, a grammar of Colonial Valley Zapotec, does not describe a Progressive category. As Colonial Valley Zapotec is considered to be a historical variety of Western Valley (Central), the lack of a Progressive /ka-/ in this language would require an unexpected break in the chain between Proto-Zapotec and modern Central Zapotec languages. Based on evidence from Chichicapan Zapotec (Central, Eastern Ocotlán), Smith-Stark 2004 presents an alternate analysis in which the Central Zapotec Progressive developed via gramaticalization of modal constructions involving a positional verb (specifically a cognate of Chichicapan *ká* ‘be stuck’) and a “gerundial” form of a main verb. Smith-Stark hypothesizes here that this construction likely existed in Proto-Zapotec, just not as a fully-grammaticalized TAM category:

The variation in the details of this construction indicate that the progressive should not be reconstructed in Proto-Zapotec; the modal construction, however, seems to be an old structure, which may have been possible in the ancestor of Central Zapotec and Cisyatepecan Zapotec, if not further back. (2004: 25; my translation²)

Under the Innovation Hypothesis, both the Central Zapotec languages (as defined in Fig. 4.1b) and Cisyatepecan Zapotec innovated a Progressive /ka-/.

Using a larger corpus of Colonial Valley Zapotec data, Broadwell 2015c finds that a Progressive *ca-* is attested in extant colonial-era documents, although the reflex of */tyi-/ is also used for events-in-progress (see §4.2.2). Broadwell follows Smith-Stark 2004 in treating the Progressive /ka-/ as an innovation of the Central Zapotec subgroup and suggests that the Progressive category was in relatively early stages of emergence during the colonial period.

Broadwell’s (2015c) analysis reclassified the Cisyatepecan languages (formerly considered Southern) as part of Central Zapotec on the basis that they have the Central Zapotec

¹It is worth noting that the Central Zapotec subgroup otherwise has very few (identified) shared innovations.

²“La variación en los detalles de esta construcción indica que el progresivo no se debe reconstruir para el protozapotec, aunque la construcción modal parece ser una formación antigua que se encontraba en el ancestro del zapotec central y del cisyatepequeño, si no más para atrás.”

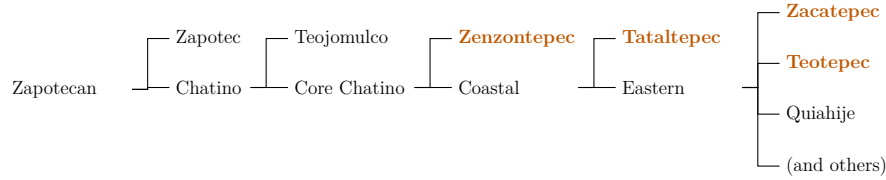


Figure 4.2: Classification of Chatino languages (see Campbell 2013, 2017)

/ka-/. Additional research, notably work by Rosemary G. Beam de Azcona (2014; 2018), supported this reclassification, and resulted in the revised tree shown in Fig. 4.1c on page 38. In this classification, the languages previously grouped together within “Southern Zapotec” have been split across the Zapotec tree. Southern Zapotec is recognized not as a genetic group with a unique shared ancestor, but instead as a geographic group which has converged due to intense contact. Cisyauztepecan and Tlacolulita languages now appear within the Central branch; notably, the Southern languages which have a Progressive *ka-* category are all Cisyauztepecan languages.³ Within the new classification, then, reflexes of */kkay-/ only occur in Central Zapotec (as indicated by Table 4.1).

The Innovation Hypothesis has a certain appeal given this new classification of Southern Zapotec languages: under the Rentention Hypothesis, the Proto-Zapotec Progressive */kkay-/ must have been independently lost at least three times, once at each split of the tree. On the other hand, as noted in Kaufman’s (1993/2016) original reconstruction, there is a clear cognate category in Chatino languages, which form the other half of the Zapotecan language family. The Progressive categories in four Chatino languages are outlined in (49). (For context, the classification of the Chatino languages is shown in Fig. 4.2.)

- (49) Chatino Progressives (cognate to */kkay-/ in Kaufman’s (1993/2016) reconstruction)
- a. Zenzontepec (Campbell 2011: p. 226, Table 3)
nte(y)-, *nch-*
 - b. Tataltepec (Sullivant 2015: p. 322, ex. 4)
nt(y)-, *nk(y)-*, *n(y)-*
 - c. Zacatepec (Villard 2015: p. 284, Table 5.3; see also Woodbury 2019)
ntā-, *ntī̄-k-*, *nkȳ-*

³I have not identified resources on Tlacolulita TAM categories.

- d. Teotepec (McIntosh 2015: p. 316, Table 9.6)
jy-, *n-*, *nt-*, *nty-*, *y-*, *yn-*, \emptyset -

Given the evidence from Chatino languages, the Innovation Hypothesis would require the Progressive category to develop separately (though from the same periphrastic modal construction) in both Chatino and Central Zapotec.

In either the Innovation or Retention scenario, we are still left with the question of what the *semantics* of the Proto-Zapotec(an) TAM categories looked like. Previous studies of Zapotecan TAM systems have focused almost entirely on the presence (or absence) of cognate morphemes. In the following sections I build off of Broadwell (2015c) work and outline the imperfective TAM categories of Central (§4.2) and non-Central (§4.3) Zapotec languages.⁴ I find that across all Zapotec subgroups, reflexes of Proto-Zapotec */tyi-/ carry some general imperfective semantics beyond characterizations. I propose that these semantics should be reconstructed to Proto-Zapotec */tyi-/, regardless of whether we ultimately adopt the Innovation or Retention analyses.

I further discuss possible consequences of my findings in §4.4, but I wish to emphasize here that these results are very tentative. Ultimately, the literature on Zapotec semantics is not robust enough to understand the details of the TAM system of *any* Zapotec language; thus, a detailed reconstruction and refined analysis of semantic change is well out of reach. However, in what follows I attempt to sketch, in as precise terms as possible given the limits of the data, the general shape of this complicated picture.

4.2 Imperfectives within Central Zapotec

4.2.1 Introduction

In the following sections, I discuss reflexes of */tyi-/, */kkay-/, and */na-/ in different Central Zapotec languages; the languages mentioned in this discussion are highlighted in

⁴I focus here exclusively on the aspectual requirements of the relevant categories. Zapotec TAM systems are frequently described as “primarily aspectual”, but some categories seem restricted by tense/mood as well. This would be a productive area for future research.



Figure 4.3: Classification of Central Zapotec languages referenced in this section (see Beam de Azcona 2018; Foreman & Lillehaugen 2017; Smith-Stark 2007)

orange in Fig. 4.3. The main goal here is to determine shared semantics for cognate TAM categories across the subgroup, with the intent of reconstructing plausible semantics to the proto-language. I rely here on previously published analyses of these languages and their TAM systems (including using the names of TAM categories established by those analyses), although in some cases I draw inferences about whether a particular example should be categorized as a characterization, a state, or an event-in-progress.

4.2.2 Reflexes of */tyi-/

In each of the Central Zapotec languages surveyed, the reflex of */tyi-/ has a form like /r-/ or /ri-/. Most descriptions call this category “Habitual” and specify that it can appear in past or present (but not future) contexts (see e.g. Bueno Holle 2019 (p. 24) on Isthmus Zapotec or Lopez Cruz 1997 (pp. 85–87) on San Pablo Güilá Zapotec). However, some studies acknowledge that — similar to the Tlacoahuaya Zapotec Imperfect *r*-, as

outlined in Chapter 3 — this category has a wide variety of uses. The specific range of this category differs between languages.

Let us look first at Mitla Zapotec; here I draw from work by Stubblefield & Stubblefield (2019) and Courtney Smith (2019). The Mitla Habitual has the forms *r-*, *ri-*, and *ru-* (reflexes of */tyi-/); as might be predicted, it does appear marking characterizations, as in (50).

- (50) Mitla Zapotec (Stubblefield & Stubblefield 2019; glossing from Smith 2019)

r-ajw=ni *yäjt*
HAB-eat=3SG tortilla

‘He eats tortillas’ (p. 78, entry for *=ni*)

Smith 2019 analyzes the distribution of the Mitla Zapotec Habitual in Stubblefield & Stubblefield 1994 (a collection of narratives). In this corpus, the Mitla Zapotec Habitual frequently occurs in clauses denoting events-in-progress, as shown in (51).

- (51) Mitla Zapotec (Stubblefield & Stubblefield 1994; glossing from Smith 2019)

r-olk-a *kuyoʔt* *n-agaʔ* *r-bih=ni* *r-tehB=ni* *agaʔ=ni*
HAB-scream-also coyote ST-lie HAB-turn=3SG HAB-fall=3SG lie=3SG

‘Screaming, that coyote was lying, turning, throwing (himself) down, lying’ (*The Rabbit and the Coyote*, p. 71, line 62)

The Mitla Habitual is also found marking *perfective* situations in narratives, as in (53).⁵

- (53) Mitla Zapotec (Smith 2019)

r-sloh *re-man* *r-yejhY* *sas* *r-yacisak=ni*
HAB-begin PL-animal HAB-make.noise and HAB-be.quiet=3SG

‘Those animals began to make noise, then it was all quiet again.’

⁵A similar use of the Habitual is reported for Chichicapan Zapotec by Benton 1997, as shown in (52). In this study, Benton found that the “completive to habitual shift” makes the reported event “more vivid, similar to the shift from the past to the historical present in English” (1997: 36).

- (52) Chichicapan Zapotec (Benton 1997)

Ya *la’h* *ra’* *bi* *sohla* *ru-llihdzi* *ra’* *bi,* *chi’chi* *gu-nyi’* *la’ga’h*
now PREP PL 3.HUM only HAB-laugh PL 3.HUM then COMP-speak again
w’dzida’ka
frog

‘Now then, they just laugh; then the frog spoke again.’ (p. 37, ex. 4g)

To summarize, the Mitla Zapotec reflex of */tyi-/ can mark clauses denoting characterizations, events-in-progress, and perfectives, although these latter two uses may be restricted to particular narrative contexts.⁶

Next let us consider data from Colonial Valley Zapotec; here I draw primarily from the discussion in Broadwell 2015c, as well as my own knowledge of Colonial Valley Zapotec grammar. (See §1.4.2 for a background on the Colonial Valley Zapotec corpus.) The Colonial Valley Imperfect⁷ is orthographically represented as *t(i)-*. Broadwell 2015c includes examples which I categorize as characterizations (55a), states (55b), and events-in-progress (55c).

(55) Colonial Valley Zapotec (Broadwell 2015c)

a. Characterization

chi ti-zaà beni neza quela=cahui ciani liaça t-aca
 when IMPF-walk person road NMLZ=dark many time IMPF-be

‘When a person walks down the road in the dark, many times it happens that...’
 (p. 160)

b. (Cognitive) state

niacani anna t-acapea=to oa-lij=ca citoo tete
 thus now IMPF-know=2PL PRF-true=EMPH abundant very
co-xiguê bezeloo lato
 PFV-trick=EMPH devil 2PL

‘So now you know truly that the devil tricked you’ (p. 175–76)

c. Event-in-progress

ti-nni=a anna oa-lij=ca quitaalij beni Christiano
 IMPF-say=1SG now PRF-true=EMPH all person Christian

‘I say now truly that all Christian people...’ (p. 173)

⁶The Mitla Zapotec Habitual is also the default perfective marker on the quotative verb *ähp* ‘say’ (54).

(54) Mitla Zapotec (Smith 2019)

a-bikes=ä gid r-ähp=ni
 already-sick=1SG chicken HAB-say=3SG

‘“I’m tired of chicken” he said’

This use of */tyi-/ reflexes on quotative verbs is reported in several Zapotec languages (including Tlacoahuaya Zapotec, as described in §3.4), but I leave it to the side in this diachronic discussion.

⁷This category is labeled “Habitual” in Smith-Stark 2008 and simply “T” in Broadwell 2015c; here I gloss it as Imperfect, as Broadwell 2015c analyzes the category has having general imperfective semantics.

While we cannot know the exact pragmatics of these Colonial Valley Zapotec examples, there is an apparent narrative quality. As the extant Colonial Valley Zapotec corpus is limited to a set of highly performative genres (e.g. wills, prayers, declarations of doctrine), it is possible that these event-in-progress readings were restricted to specific contexts.

As a final mini-case study, we can turn to Queigolani Zapotec; here I draw data from Black 1994. Unlike the examples above, where some narrative/pragmatic decisions seem to be at play, clauses marked with the Queigolani Habitual *r-* are *fully* ambiguous between characterization and event-in-progress readings; an example of this ambiguity is shown in (56a). When there is a preposed completive clause, as in (56b), the situation is disambiguated to being an event-in-progress.

(56) Queigolani Zapotec Habitual (Black 1994)

- a. Characterization in free variation with event-in-progress

R-oo noo nis
HAB-drink 1.EXCL water

‘I drink water (regularly)’ or ‘I am drinking water.’ (p. 43, ex. 48b)

- b. Event-in-progress as only available interpretation

Or ne w-lenza Swa, r-ool Mblid liber
hour that COMP-arrive John HAB-read Mary book

‘When John arrived, Mary was reading a book.’ (p. 43, ex. 49)

This event-in-progress marking is reportedly in free variation with the Queigolani Progressive *ga* (see §4.2.3).

As described in Chapter 3, the Tlacoahuaya Imperfect *r-* is used to mark characterizations and, on a specific set of verbs, to mark ongoing situations, in addition to a more general imperfective use in narrative contexts. I have found no other description of a Zapotec language which includes some correlate of the experiential statives I describe in §2.4; further research in this area would be very productive for understanding the development of this category in Central Zapotec.

4.2.3 Reflexes of */kkay-/

Reflexes of */kkay-/ in Central Zapotec have very consistent event-in-progress semantics (and are, predictably, called Progressives). Examples with these readings are seen below.

- (57) a. Colonial Valley Zapotec (Broadwell 2015c)
co-na-chahui=to ticha ca-nni=a
 PFV-hear-well=2PL word PROG-say=1SG
 ‘Hear well what I am saying’ (p. 171)
- b. Mitla Zapotec (Stubblefield & Stubblefield 1994; glossing my own)
ree kay-a?p=ä gih re r-ähp=ni
 here CONT-watch=1SG stone this HAB-say=3SG
 “‘I am watching this rock,’ said [the rabbit]’ (*The Rabbit and the Coyote*, p. 78, l. 97)
- c. Quiegolani Zapotec (Smith-Stark 2004, citing Méndez Espinosa)
ga y-o’l me’d win
 PROG GER-sing child young
 ‘The child is singing.’ (p. 5, ex. 9b)
 Original translation: ‘Está cantando el niño.’

The Colonial Valley Zapotec Progressive is also attested on (cognitive) stative verbs, as in (58).

- (58) Colonial Valley Zapotec (Broadwell 2015c)
anna c-acapea=to oa-lij=ca co-xiguie=xò bezeloo lachi=to
 now PROG-know=2PL PRF-true=EMPH PFV-trick=EMPH devil heart=2PL
 ‘Now you know truly that the devil tricked your heart’ (p. 175)

I have found no language where the a reflex of */kkay-/ marks characterizations. Recall, however, that some events-in-progress are marked by reflexes of */tyi-/ in these languages. This will be discussed further in §4.2.5.

4.2.4 Reflexes of */na-/

Central Zapotec reflexes of */na-/ are usually described only in passing. These categories tend to have the form *na-* or *n-* and are usually called Stative or Neutral. In general,

Statives are attested only on a limited set of verbs (as in Tlacoahuaya Zapotec, see §2.2). For example, Munro & Lopez 1999 notes that the Quiaviní Zapotec Neutral *n-* occurs on a small set of verbs and has a meaning similar to the Habitual *r-*, but “sometimes a more stative meaning” (1999: 17). Some examples of Quiaviní Zapotec verbs with a Neutral form are shown in (59). Here the present of a Neutral form negates the need for a Progressive form.⁸

(59) San Lucas Quiaviní Zapotec (Munro & Lopez 1999; underlining added)

- a. **ra’ihsy** sleeps | *duerme* § perf. bta’ihsy; irr. ga’isy; def. za’ihsy; neut. nagya’ihsy, nagye’ihsy, niye’ihsy “is sleeping | *está durmiendo*”; sub. nya’ihsy; no prog. (entry for *ra’ihsy*, p. 216)
- b. **ru’zhii’iny** gets pregnant | *se embaraza, queda encinta* § neut. nu’zhii’iny “is pregnant | *está encinta*”; perf. gu’zhii’iny (entry for *ru’zhii’iny*, p. 304)

Broadwell 2015a finds that the Colonial Valley Zapotec Stative *na-* tends to appear on stage-level (temporary) predicates, in contrast with the Perfect *wa-* which appears on individual-level predicates. For example in (60), the Stative is used on the predicates ‘be white’ and ‘be clean’, which are temporary qualities of candle wicks (while the text specifies that wax is always dirty and sticky).

(60) Colonial Valley Zapotec (Broadwell 2015a)

<i>yobi</i>	<i>zaa</i>	<i>oa-chaba</i>	<i>n-aca=ni</i>	<i>oa-te</i>	<i>n-aca=ni:</i>	<i>çica=ni</i>	<i>yobi</i>
same	wax	PRF-be.dirty	ST-be=3	PRF-sticky	ST-be=3	thus=3	same
<i>too</i>	<i>na-gati</i>	<i>na-yaa</i>	<i>n-aca=ni</i>				
wick	ST-white	ST-be.clean	ST-be=3				

‘The wax is dirty and sticky; the wick is white and clean: [if it has any dirtiness or odor, the wax caused it by having been joined with it.]’ (slide 15)

While further research is necessary to determine the bounds of the verbs which may take *n(a)-* as a TAM category, the generalization of “stative-marking” is quite consistent across the Central Zapotec subgroup.

⁸Note that the Quiaviní Zapotec verb *a’ihsy* ‘sleep’ in (59a), which takes the Neutral as a default imperfective, is cognate with the Tlacoahuaya Zapotec verb *a’asy* ‘sleep’, which takes the Imperfect as its default imperfective (see (24a) on page 23).

4.2.5 Summary

All the Central Zapotec languages surveyed have reflexes of Kaufman’s (1993/2016) Imperfect */tyi-/, Progressive */kkay-/, and Stative */na-/. In general, the semantics of the Progressive and the Stative are relatively stable across Central Zapotec; the Progressive, in particular, is used very consistently across different languages and has a relatively clear-cut semantic range. The Imperfect, on the other hand, has a broader semantic range that varies between different languages. Although not all descriptions of Central Zapotec languages discuss event-in-progress uses of the Imperfect, it appears common to have some level of overlap between the Imperfect and the Progressive. This overlap is most prominent in Quiegolani Zapotec, where the Habitual *r-* can always be interpreted as an event-in-progress and thus overlaps fully with the Progressive *ga*.

(61) Quiegolani Zapotec

- a. ***R-oo*** *noo* *nis*
 HAB-drink 1.EXCL water

‘I drink water (regularly)’ or ‘I am drinking water.’ (Black 1994: 43; repeated from (56a))

- b. ***ga*** *y-o’l* *me’d* *win*
 PROG GER-sing child young

‘The child is singing.’ (Smith-Stark 2004: p. 5, ex. 9b, citing Méndez Espinosa; repeated from (57c))

Original translation: ‘Está cantando el niño.’

Smith 2019 finds that the Mitla Zapotec Habitual is used to mark events-in-progress in narratives. Anecdotally — from my own perusal of the text *The Rabbit and the Coyote* in Stubblefield & Stubblefield 1994 — the Mitla Zapotec Habitual seems to be used to mark events-in-progress in the narrative scene-setting (62a), while the Progressive is used within the dialog (62b).

(62) Mitla Zapotec (Stubblefield & Stubblefield 1994, *The Rabbit and the Coyote*)

- a. *r-olk-a* *kuyoʔt* *n-agaʔ* *r-bih=ni* *r-tehB=ni* *agaʔ=ni*
HAB-scream-also coyote ST-lie HAB-turn=3SG HAB-fall=3SG lie=3SG
‘Screaming, that coyote was lying, turning, throwing (himself) down, lying’ (p. 71, line 62; glossing from Smith 2019; repeated from (51))
- b. *ree* *kay-aʔp=ä* *gih* *re* *r-ähp=ni*
here CONT-watch=1SG stone this HAB-say=3SG
‘‘I am watching this rock,’’ said [the rabbit]’ (p. 78, l. 97; glossing my own; repeated from (57b))

Without more detailed semantic descriptions of Central Zapotec TAM systems, we can draw no firm conclusions about the overlap between the reflexes of */tyi-/ and */kkay-/. However, we can generalize that the Central Zapotec reflexes of */tyi-/ tend to include general imperfective semantics (despite being commonly labeled ‘‘Habitual’’) and that there has been fluctuation in the system since the diversification of Central Zapotec.

4.3 Imperfectives outside of Central Zapotec

4.3.1 Introduction

We now leave Central Zapotec; in this section, I attempt to characterize the imperfective systems of the other Zapotec subgroups, insofar as this is possible with current descriptions. The level of detail in descriptions of TAM categories is highly variable, but it is possible to extract some generalizations about the */tyi-/ reflex in these languages. I want to be clear that this section represents my own interpretation of these sources, which cover languages with which I have no personal experience.

Table 4.2 shows the TAM systems for Macuiltianguis Zapotec (Northern) and Coatlán-Loxicha Zapotec (Macro-Coatecan, formerly classified within Southern), the two case studies I will focus on in this section. Each of these languages include two imperfective TAM categories, Habitual and Stative, which are reflexes to */tyi-/ and */na-/ (respectively).

Name	Forms	Name	Forms
Habitual	<i>ru-</i> , <i>re-</i> , <i>ri-</i> , <i>r-</i> , <i>a/ir-</i>	Habitual	<i>nd-</i> , <i>n-</i>
Stative	<i>n-</i> , <i>te(y)-</i> , \emptyset -	Stative	<i>n-</i>
Completive	<i>be-</i> , <i>bi-</i> , <i>gu-</i> , <i>gut-</i> , <i>u-</i> , <i>gw-</i>	Completive	<i>mb(i)</i> , <i>ɲgw-</i>
Potential	<i>i-</i> , <i>e-</i> , <i>g-</i> , <i>gu-</i> , <i>ch-</i> (and others)	Potential	<i>w-</i> , <i>g-</i> , fortition, tonal changes
Indef. Potential	<i>gw(a)-</i>	Future	<i>s-</i>
Non-Finite	<i>gw(e)-</i>	Irrealis	<i>ɲ-</i> , <i>ɲg(w)-</i>

(a) Macuiltianguis Zapotec (Foreman 2006) (b) Coatlán-Loxicha Zapotec (Beam de Azcona 2004)

Table 4.2: Example TAM systems outside Central Zapotec

4.3.2 Reflexes of */tyi-/

Despite its name, the “Habitual” encompasses broad imperfective semantics in both Macuiltianguis Zapotec and Coatlán-Loxicha Zapotec. According to Foreman 2006, the Macuiltianguis Habitual can encode both “habitually recurring events and activities” and “activities that are ongoing or in progress” (p. 109). Examples below show this category marking characterizations (63a), property statives (63b), bodily states (63c), and events-in-progress (63d).

(63) Macuiltianguis Zapotec (Foreman 2006)

- a. *ttuttu saa ribiia=ya'* *ttu bia'*
each day HAB/get.on=1SG.NOM a horse
‘Everyday, I ride a horse.’ (p. 109, ex. 11)
- b. *nuuyha àbíí raasi=ni* *beyeeti' daani ttsia=nà*
someone NEG HAB/be.afraid=PREP bat ST/should POT/go=3.NOM
llè'è beelia=nà'
in cave=DIST
‘Someone who isn’t afraid of bats should go in that cave.’ (p. 113, ex. 24)
- c. *rtuun=yà'*
HAB/be.hungry=1SG
‘I’m hungry’ (p. 102, ex. 128; my gloss & segmentation)

- d. *rut̥tin=yà*
HAB/sell=1SG

‘I’m selling’ (p. 102, ex. 128; my gloss & segmentation)

In describing the Coatlán-Loxicha Zapotec Habitual, Beam de Azcona 2004 explicitly acknowledges that “‘imperfective aspect’ would probably be a more accurate label” and that the term “Habitual” is used only to be consistent with other Zapotecan literature (p. 184). Examples of the Coatlán-Loxicha Habitual are shown below, where it marks a characterization (64a), a state (64b), and an event-in-progress (64c).

(64) Coatlán-Loxicha Zapotec (Beam de Azcona 2004)

- a. *dyáryó nd-â ár goʔz mbzhîn tẽʔl*
daily HAB-go 3.HUM.FAMR hunt ANIM:deer night

‘Daily he went to hunt deer at night.’ (p. 184, ex. 4.13)

- b. *nd-ùn beʔy xaʔ*
HAB-do think 3.HUM.RESP

‘They (sg.) are preoccupied.’ (p. 184, ex. 4.14)

- c. *Jwánh nd-ê yà pán nà chókólát*
Juan HAB-AUX INF:eat bread and chocolate

‘Juan is eating bread and chocolate.’ (p. 185, ex. 4.20)

The aspectual information presented here for the Macuiltianguis and Coatlán-Loxicha Habituals is, in my survey of the literature, representative of non-Central Zapotec languages generally. That is, this category is best understood as a general imperfective.

4.3.3 Reflexes of */na-/

In both Macuiltianguis Zapotec and Coatlán-Loxicha Zapotec, the second imperfective category is termed “Stative”. Examples of the Macuiltianguis Zapotec Stative are shown in (65); this covers a variety of states, as well as verbs of motion (65c). Foreman 2006 indicates that there is a split between verbs which have a stative form and verbs which take the Habitual to mark ongoing aspect (p. 109).

(65) Macuiltianguis Zapotec (Foreman 2006)

- a. *chi nabiia'=ni=lù' Tagaayu'*
 already ST/know=PREP=2SG.DAT Macuiltianguis
 ‘Do you know Macuiltianguis?’ (p. 108, ex. 4a)
- b. *làà=nà chi teya'athi=nà loochi elaani=ya'*
 BASE=3 already ST/be.asleep=3.NOM when POT/return=1SG.NOM
 ‘He will already be asleep when I return.’ (p. 116, ex. 37)
- c. *para chi dedáá'=ru=nà chi bèttsànàá'=nì*
 for already ST/come.back=still=3.NOM already COMP/get.married=3.GEN
tàà'=nna
 FOC=and
 ‘So she was coming back — she had already gotten married—’ (p. 108, ex. 6)

Coatlán-Loxicha Zapotec also has a Stative category, but Beam de Azcona 2004 analyzes this as unproductive and groups it with the derivational morphology. It appears on *ăk* ‘become’ (66) and is fossilized on certain adjectives (67).

(66) Coatlán-Loxicha Zapotec (Beam de Azcona 2004)

- mě byî nděŋ mäch n-ăk*
 3.HUM.RESP man this ugly ST-become
 ‘This man is bad.’ (p. 246, ex. 5.47)

(67) Coatlán-Loxicha Zapotec (Beam de Azcona 2004: 247)

- a. *ngătz* ‘black’, cf. *-gătz* ‘become black’
 b. *ňa⁷l* ‘open (adj)’, cf. *-ya⁷l* ‘open (verb)’

It is quite common across Zapotec languages to analyze Stative-marking as unproductive and even leave it out of the general TAM description. However, where descriptions of it exist, it seems to complement the ongoing uses of the more general imperfective */tyi/-category.

4.3.4 Summary

None of the non-Central languages I surveyed have a category that fits the description “Progressive”, nor do they have a category cognate to the /ka-/ found in Central Zapotec.

They do all have a general imperfective category, a reflex of */tyi-/, usually labeled “Habitual” but with general imperfective semantics. Descriptions usually also include a Stative, a reflex of */na-/. Some but not all descriptions include note of special imperfective-marking on verbs of movement and position.

4.4 Reflections

Kaufman 1993/2016 reconstructs three imperfective TAM categories to Proto-Zapotec and assigns them the names Habitual (*/tyi-/), Progressive (*/kkay-/), and Stative (*/na-/). These terms are very common in the literature on Zapotecan languages, to the extent that Beam de Azcona 2004 uses the term “Habitual” for a Coatlán-Loxicha Zapotec TAM category while acknowledging that it would be more aptly described as “Imperfective”. Due to this rather circular process of naming Zapotec TAM categories, we are led to assume that the Proto-Zapotec TAM system neatly divided the imperfective space into the three categories outlined by Deo (2015): characterizations (Habitual), events-in-progress (Progressive), and states (Stative). But what modern Zapotec languages tell us about the semantic range of these TAM categories?

Within Central Zapotec languages, reflexes of */tyi-/ mark clauses denoting characterizations and some ongoing imperfectives (for example, unbounded interpretations of experiential statives in Tlacoachahuaya Zapotec); I argue this category is best defined as a general Imperfect. Reflexes of */kkay-/ in these languages cover all events-in-progress not marked by the Imperfect, and reflexes of */na-/ mark unbounded, stative interpretations on a relatively narrow subset of verbs.

Outside of Central Zapotec, I have identified no documented reflexes of */kkay-/-; instead, reflexes of */tyi-/ mark all clauses denoting both characterizations and events-in-progress. Reflexes of */na-/ again appear only on a narrow subset of verbs.

Regardless of whether we adopt the Innovation Hypothesis — in which the Progressive /ka-/ is an innovation of Central Zapotec — or the Retention Hypothesis, the fact that every reflex of Proto-Zapotec */tyi-/ has some more general imperfective semantics outside

of marking habituals should lead us to reconstruct */tyi-/ as an Imperfect. My proposition is that the Imperfect */tyi-/ had fully generalized imperfective semantics, while */na-/ and */kkay-/ (whether as a fully-grammaticalized TAM category or only a periphrastic expression) covered smaller subsets of imperfective meaning; the Imperfect would then be blocked from those expressions by pragmatic principles. This analysis captures the breadth of description of imperfective TAM in modern Zapotec languages, and in particular it provides a more comfortable path for the Retention Hypothesis, in which a Proto-Zapotec Progressive category */kkay-/ was lost in all non-Central branches of Zapotec, allowing the Imperfect to take over that range of meanings.

The study undertaken in this chapter has been limited in scope, but I hope it may serve as a foundation for future investigation into Zapotec(an) temporal-modal semantics. Any more detailed understanding of Proto-Zapotec imperfectives will require extensive further research on the imperfectives of modern languages. Moving forward, there are two main lines of research which would support our understanding of Proto-Zapotec TAM. First, within Zapotec languages, the next step would be to investigate possible non-TAM category reflexes of */kkay-/. If we assume Smith-Stark's (2004) Innovation Hypothesis for the Central Zapotec Progressive, we would expect to find cognates in other languages, perhaps even appearing in periphrastic modal constructions denoting some events-in-progress. Second, a compelling semantics reconstruction of the Proto-Zapotec imperfective system would incorporate more systematic semantic evidence from Chatino, Zapotec's closest relation.

Chapter 5

Conclusion

In Chapter 2, I approached the Tlacoahuaya Zapotec imperfective system as a whole, looking broadly at how imperfective situations were communicated by the TAM system. While my scope was limited to the inflectional TAM categories (I ignore, for the moment, the impact of adverbs and pragmatics), this method illuminated a previously undescribed set of semantic verb classes. In particular, I described a set of “experiential statives” which are not recognized as a formal class in other descriptions of Zapotec languages. The precise delimitation of these classes is still to be determined, but the early evidence presented here points to an Aktionsart-based classification; future research on the semantics of Tlacoahuaya Zapotec verbs could help elucidate these classes further. Furthermore, applying this approach to descriptions of other Zapotec languages could help support more comprehensive analysis of Zapotec TAM.

With this larger picture in mind, in Chapter 3 I delved deeper into the Tlacoahuaya Zapotec Imperfect *r-*. This category has a wide variety of uses — but the framework set up in Chapter 2 allowed me to differentiate between imperfective uses of *r-* that fell within the prototypical semantics and those that were likely driven by pragmatic force or fall outside the common use. I concluded that Tlacoahuaya Zapotec *r-* is best understood as a general imperfective category, rather than simply as a “Habitual”. A more detailed description of Tlacoahuaya Zapotec TAM categories across a wide variety of genres would help support further analysis.

Finally, in Chapter 4 I synthesize descriptions of imperfectives in other Zapotec languages to argue that the Proto-Zapotec */tyi-/ — called a “Habitual” in Kaufman 1993/2016 — should be reconstructed as having general imperfective semantics. In elicitation settings,

reflexes of */tyi-/ in modern Zapotec languages are usually translated as characterizations; however, as demonstrated throughout this paper, further investigation shows that these reflexes have some more general imperfective semantics *in almost every case*. This shows the importance of detailed comparison between TAM categories in multiple genres.

In general, approaching the semantics of Tlacoahuaya Zapotec imperfectives from three separate angles facilitated a broader understanding of this system than would have been possible otherwise.

Abbreviations

??	unknown	EXCL	exclusive	NOM	nominative
1	first person	FAMR	familiar	PFV	perfective
2	second person	FOC	focus	PL	plural
3	third person	FORM	formal	POSS	possessive
AGN	agentive	GEN	genitive	POT	potential
ANIM	animate	GER	gerund	PREP	preposition
APPL	applicative	HAB	habitual	PRF	perfect
AUX	auxiliary	HUM	human	PROG	progressive
CAUS	causative	IMPF	imperfective	PROX	proximal
COMP	complementizer	INAN	inanimate	REL	relative
CONT	continuous	INF	infinitive	RESP	respectful
CTFL	counterfactual	INFRM	informal	SG	singular
DAT	dative	INTR	intransitive	ST	stative
DIST	distal	NEG	negative	ZPROG	Zapotec motion verb progressive
EMPH	emphatic	NEUT	neutral aspect		
		NMLZ	nominalizer		

Data Sources

The following data sources are cited in this paper. AILLA = The Archive of the Indigenous Languages of Latin America, www.ailla.utexas.org

- | | |
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| 40pesos | <p>Ángeles Martínez, José (Speaker), Moisés García Guzmán (Translator) & May Helena Plumb (Researcher). 2018. Forty pesos of bread (JoseAM), SJTZ_180627-120001_JoseAM_forty_pesos_bread.wav. In: <i>Zapotec Collection of May Helena Plumb</i>. AILLA. PID ailla:262633.
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| abasolo | <p>Ángeles Martínez, José (Speaker), Moisés García Guzmán (Translator) & May Helena Plumb (Researcher). 2019. Tlacoachahuaya and Abasolo conflicts (JoseAM), SJTZ_190619-122156_JoseAM_abasolo.wav. In: <i>Zapotec Collection of May Helena Plumb</i>. AILLA. PID ailla:275373.</p> |
| BnZTweet | <p>@BnZunni. Various dates. <i>Tweets in Tlacoachahuaya Zapotec</i>. These tweets are written in an ad hoc orthography (sometimes accompanied by translations or commentary in Spanish and/or English) by Moisés García Guzmán.</p> |
| cabildo | <p>Ángeles Martínez, José (Speaker), Moisés García Guzmán (Translator) & May Helena Plumb (Researcher). 2019. Electing the cabildo (JoseAM), SJTZ_190611-120510_JoseAM_electing_cabildo.wav. In: <i>Zapotec Collection of May Helena Plumb</i>. AILLA. PID ailla:275379.
 [Translation session with Moisés García Guzmán, PID ailla:275380]</p> |
| cornChange | <p>García Cruz, Antonio (Speaker), Moisés García Guzmán (Translator) & May Helena Plumb (Researcher). 2018. How planting corn has changed (AntonioGC), SJTZ_180625-204432_AntonioGC_how_planting_corn_has_changed.wav. In: <i>Zapotec Collection of May Helena Plumb</i>. AILLA. PID ailla:262648.
 [Translation session with Moisés García Guzmán, PID ailla:262649]</p> |
| SJTZverb18-2 | <p>García Guzmán, Moisés (Speaker) & May Helena Plumb (Researcher). 2018. SJTZ Verbs (June 2018), SJTZ_180606-183043_MoisesGG_tam.wav. In: <i>Zapotec Collection of May Helena Plumb</i>. AILLA. PID ailla:275340.</p> |
| SJTZverb19-13 | <p>García Guzmán, Moisés (Speaker) & May Helena Plumb (Researcher). 2019. SJTZ Verbs (June 2019), SJTZ_190612-214347_MoisesGG_tam.wav. In: <i>Zapotec Collection of May Helena Plumb</i>. AILLA. PID ailla:275355.</p> |

- SJTZverb19-14 García Guzmán, Moisés (Speaker) & May Helena Plumb (Researcher). 2019. SJTZ Verbs (June 2019), SJTZ_190612-220831_MoisesGG_go_come_tam.wav. In: *Zapotec Collection of May Helena Plumb*. AILLA. PID [ailla:275356](#).
- SJTZverb19-21 García Guzmán, Moisés (Speaker) & May Helena Plumb (Researcher). 2019. SJTZ Verbs (June 2019), SJTZ_190619-214613_MoisesGG_go_return.wav. In: *Zapotec Collection of May Helena Plumb*. AILLA. PID [ailla:275363](#).
- SJTZverb19-22 Ángeles Martínez, José (Speaker) & May Helena Plumb (Researcher). 2019. SJTZ Verbs (June 2019), SJTZ_190620-111028_JoseAM_q_conds.wav. In: *Zapotec Collection of May Helena Plumb*. AILLA. PID [ailla:275364](#).
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- susto1 Ángeles Martínez, José (Speaker), Moisés García Guzmán (Translator) & May Helena Plumb (Researcher). 2019. About susto (JoseAM), SJTZ_190624-122321_JoseAM_susto.wav. In: *Zapotec Collection of May Helena Plumb*. AILLA. PID [ailla:275375](#).
[Translation session with Moisés García Guzmán, PID [ailla:275376](#)]
- tlacuache Unknown authors. n.d. *Story about a coyote and an opossum*. A typewritten copy of this parable (Tlacoahuaya Zapotec with a Spanish free translation) was given to me by José Ángeles Martínez in June 2018. José indicated that it had been collected decades previously by another researcher, who was possibly Juan José Rendón.

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VITA

May Helena Plumb grew up on the ancestral territory of the Abenaki people in what is now called Midcoast Maine. That her graduate research relates to the languages of Oaxaca, Mexico, rather than the languages of Maine, occasionally makes her sad.

May's interest in linguistics and language documentation began when she was a high school student at Lincoln Academy. She began studying Zapotec languages in 2013 as an undergraduate at Haverford College, and she completed her B.A. in Linguistics in May 2016 with a thesis entitled *Conjunction in Colonial Valley Zapotec*. She entered the Linguistics PhD program at the University of Texas at Austin in September 2017.

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